

# AMERICAN ARTISAN and Hardware Record

Vol. 80. No. 13.

620 SOUTH MICHIGAN AVENUE, CHICAGO, SEPTEMBER 25, 1920.

\$2.00 Per Year.

## \$35 Per Week Clear Profit for 4 Years

*Reads like a romance, doesn't it?*

Well, here's the story in a nutshell:

Four years ago a well-known New York Hardware Man bought a 12 blade

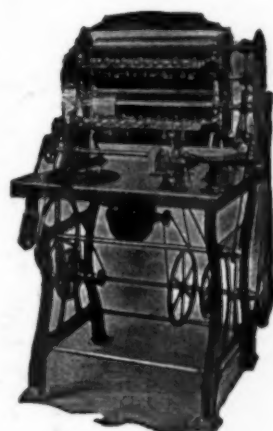
## HATFIELD COMPLETE SHARPENING MACHINE

He rented a small window in Nassau Street—installed that machine where it made every man "Sit up and take notice"—hired a man to run it.

"Results?" We'll say so. We have it straight from the man who managed this business that his **net cash profits** after paying rent, operator and all expenses, have averaged \$35.00 per week for the full four years, sharpening **all makes** of Safety Razor Blades.

Now the man who ran the machine is looking for a good window for **himself**. He says: "If the Boss can 'clean up' \$35.00 per week on a \$250.00 investment—why can't I do the same?"

He can do the same and so can you.



This is the Hatfield machine. It takes up little room but takes in big profits.

Write today for catalog and full particulars. Let us tell you how to get this profitable business in your territory. Right now is a good time to investigate. Write today and be ready for big business this winter.

## HYFIELD MANUFACTURING COMPANY

21 WALKER STREET

NEW YORK CITY



## QUICK MEAL

Blue, Black or White  
Porcelain Enameled  
Coal Ranges

are the most up-to-date  
ranges made.

They will last a lifetime.

*Place your orders now.*

**Quick Meal Stove Co.**

Division of American Stove Co.

825 Chouteau Avenue

St. Louis, Mo.

## MAHONING HEATING SYSTEMS

**"One Thousand Furnaces is a pretty good sales record"**

One of our dealers before the end of this year, will have sold 1000 Mahoning Furnaces in a single city territory. Not bad, you'll say, for one dealer. And the big part of it is this dealer wouldn't sell his Mahoning Agency for the profits on a good many thousand furnaces.

### Good Territory Still Open

The Mahoning is the furnace that is sold from coast to coast. We still have some mighty good territory open for progressive dealers.



A letter will secure our literature and complete agency details.

**The Mahoning Foundry Co.**

622 Poland Ave., Youngstown, Ohio

*We maintain Eastern and Western warehouses for the convenience of the trade.*



## WRIGHT PIPELESS HEATERS



FOUNDED 1880  
BY  
DANIEL STERN  
Thoroughly Covers  
The Hardware, Stove,  
Sheet Metal, and Warm  
Air Heating and Venti-  
lating Interests

# AMERICAN ARTISAN and Hardware Record

Address all communications and  
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Vol. 80. No. 13.

CHICAGO, SEPTEMBER 25, 1920.

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A considerable portion of the income of hardware dealers and sheet metal contractors is dependent upon the building industry. It is, therefore, to their interest to give the utmost publicity to the findings of the Fuller Industrial Engineering Corporation of New York with reference to the probable trend of building costs.

## **Building Cost Will Stay High**

The conclusions reached after a careful and unbiased study of conditions are against the likelihood of price reductions in the cost of building materials.

As to the hope for a reduction in building costs due to a reduction in wages paid to labor, it does not seem probable that the laboring man will be content to accept any reduction in the size of his pay envelope. His attitude is rather to force wages to higher planes.

The wages of the building trades throughout the United States, as well as in New York City, have risen steadily during the past seven years. Still labor is dissatisfied and restless.

The hope for a reduction in the cost of building materials rests very largely on the hope for a reduction in wages, because for every dollar spent for brick, cement or steel which goes into a building, from 85 to 90 per cent of such price ultimately goes back to the laborer who dug the clay, mined the coal, burned the brick, ground the cement, rolled the steel, and transported all of them over railroad lines to the site of the work and built them into structure.

Until these related wages go down, therefore, it is not reasonable to expect any substantial reduction in the price of building materials.

"We know of no other major influence which can bring a marked or immediate reduction in building costs," declares the Fuller Engineering Corporation, "and our mature

judgment is that there will be no substantial reduction for several years to come.

"Our advice to our clients, in view of this whole situation, is that if they need additional building facilities, and the conditions of their business justify the expenditure, it is far wiser to build now and enjoy the benefit of the improvements than to wait and lose the use of this money-making space for several years, and then build at costs which may be even higher than those of the present time."

♦ ♦ ♦ ♦ ♦

Many hardware dealers sell window glass and glaziers' supplies. The recent disaster in Wall Street, when a bomb was exploded and several persons killed, suggests the possibility of creating demand for a kind of glass recently invented which will not scatter or splinter when subjected to severe shock or impact. The number of persons injured by broken window glass in the Wall Street explosion would have been greatly reduced if the panes in the buildings shattered by the blasts had been composed of the new glass made possible by chemical science.

## **Bombs and New Glass**

In fact had this glass been in general use there would have been no shattering panes, no splinters flying through the air, and no falling pieces to land on the persons in the street.

The most important qualities of this glass which was one of chemistry's contributions to wartime needs, and which is in fact one of the few inventions that has found a prominent place in times of peace, is that when it is subjected to severe shock, or impact, it will not scatter or splinter.

These adhering qualities are not given to the glass by wire, but by a chemical composition.

It has been used in the navy for some time,

and can be made absolutely proof against the highest powered bullet.

Chemists figure that with such glass in the windows of the section affected by the explosion the casualties would have been lessened to a great extent.

◆ ◆ ◆ ◆ ◆

Zinnias are single, double, and triple. They grow profusely and last far into the fall of the year. Each year they have new surprises for lovers of flowers. Often on the same stem there are two or three flowers of different colors. A bed of zinnias is a study in pigments. The most gorgeous variations occur, from flaming crimson to pink more delicate than the first flush of dawn. Seemingly, there is no link between zinnias and hardware.

**Zinnias  
Help You**

Womenfolk especially are fond of zinnias. One of the pleasantest ways to sell goods is to get in harmony with things that people like. Women like zinnias. When they come into your hardware store these autumn days they are instinctively impressed in your favor if you chance to have on some odd corner of your show case a little vase of different colored zinnias.

◆ ◆ ◆ ◆ ◆

Opportunity in the sheet metal trade used to knock timidly at the door. Only those with uncommonly sensitive hearing could perceive the summons to better things. Today, opportunity uses a combination of klaxon horn and steam calliope. Only the man who is more soundly asleep than the Seven Sleepers of Antioch—who are fabled to have slept two hundred years at a stretch—would fail to hear opportunity's call with reference to the big profits to be obtained from automobile radiator repair work.

**Auto Radiator  
Repair Work  
Is Profitable**

Some sheet metal folk have been laboring under the wrong impression with regard to this class of work.

They have thought that it was unusually difficult to obtain the right kind of tools and repair parts and that the work itself presented intricacies beyond the skill of the average mechanic.

These impressions are wholly at variance with the facts. Within comparatively recent times the entire business of automobile radiator repair has been systematized and

brought within the scope of the average sheet metal shop.

There are enough trustworthy and progressive companies engaged in making automobile radiator repair tools and supplies to give prompt and intelligent service.

When it is taken into consideration that the vast majority of automobiles and motor trucks have engines of a water-cooling type, it can readily be calculated that the business of automobile radiator repair is certain to increase.

This country has not yet reached the saturation point in the use of automotive equipment for pleasure and freight transportation.

Indeed, conservative observers are of the opinion that it will take fully another generation before the more pressing requirements are adequately satisfied.

Consequently, the sheet metal shop which adds a department for automobile radiator repair work can rely with assurance upon a constant volume of profitable business.

◆ ◆ ◆ ◆ ◆

There is sound logic in the effect of continuous advertising upon the standards of quality in any line of commodities. It costs money to advertise. The manufacturer who spends thousands of dollars in keeping the name and virtues of his product before the buying public is obliged to maintain the goodness of the article in order not to waste the advertising. The minute he begins to lower the excellence of the material or workmanship the sales of his product begin to diminish. He loses his advertising investment and he loses the good will of the public. He is compelled, therefore, by the inexorable logic of publicity to maintain standards.

**Logic of  
Publicity**

It is precisely because he does maintain standards that his advertised product is in greater demand and easier to sell than unknown or non-advertised goods of the same class.

The natural deduction from these observations is that it is to the interest of the dealer to sell advertised lines.

Because they give satisfaction to his customers, they are more easily sold, they are more frequently sold, and thus they bring bigger profits by the more rapid ratio of their turnover.



## Random Notes and Sketches

By Sidney Arnold

Recently, my friend F. A. Spielman, Northern Missouri representative of the Beckwith Company of Dowagiac, Michigan, was in Los Angeles, California.

He was talking about salesmanship in the hardware store, and a man said he was reminded of a little dog that sat by the railroad track and a car came along and cut off the end of his tail.

The dog took it pretty hard, and a man passing picked up the dog and taking a box of salve from his pocket rubbed it on the stump of the dog's tail, and a new tail grew out.

Moral: You must spread the salve if you would succeed in the re-tail business.

\* \* \*

It is refreshing to find children who live up to their parents' instructions, says my friend, H. W. Sigrist of Modern Way Furnace Company, Fort Wayne, Indiana. He gives this illustration:

"And now, Johnny," said the teacher, "can you tell me what is raised in Mexico?"

"Aw go on," replied the bright boy. "I know what you want me to say, but ma told me I shouldn't talk rough."

\* \* \*

Credit is due my friend, J. C. Beggs, of Bemis and Call Hardware and Tool Company, Springfield, Massachusetts, for the smile that you will get out of this anecdote:

A country farmer lad was writing a letter to a city friend.

Having no other envelope than a very dirty one that he had carried in his pocket for quite a while, he used it but annexed at the end of his letter:

"P. S.—Please excuse the envelope. It was clean when it left my hands."

\* \* \*

Occasionally it is advisable to use to the full extent the space available for an advertisement, says my friend, James Robinson of Hart and Cooley Company, New Britain, Connecticut.

One of the cases where this is advisable is shown in the following story which he sends me:

A woman had entered a newspaper office for the purpose of inserting an advertisement in the "Wants" column.

"I wish," said she to the clerk, "to put in this advertisement for a cook. It will go in three lines, won't it?"

"No, madam," said the clerk, after counting. "We shall have to charge you for four lines, but you can add four words if you wish."

Whereupon the lady had an idea. "Just add," said she, "policeman stationed opposite corner!"

\* \* \*

There are some kind of bills that can never be paid in full. There is always a balance due. I am on the debit side of the ledger in this respect to my friend, C. E. Shields of Rock Island Manufacturing Company, Rock Island, Illinois. I owe him for a laugh.

He told me about a sentimental Irishman whom he overheard lamenting the inequalities of justice.

Said the Irishman: "Ah, yes, the world is always so—we never strew flowers on a man's grave until after he is dead."

\* \* \*

Don't pry too deeply into the motives which prompt deeds of charity, advises my friend, O. L. Moon, of the Scheible-Moncrief Heater Company, Cleveland, Ohio.

He gives a case where the motive is not as lofty as the circumstances might indicate.

Here it is:

"Why do you feed every tramp who comes along? They never do any work for you," asked the man.

"No," said his wife, "but it is quite a satisfaction to see a man eat a meal without finding fault with the cooking."

\* \* \*

Baseball fans will enjoy the humor of this story, narrated by my friend Tom ("Gilt Edge") Peacock of Grand Rapids, Michigan, sales representative of R. J. Schwab and Sons Company, Milwaukee, Wisconsin:



At a ball game between a South Carolina negro team and a visiting team of similar color a negro preacher was acting as umpire.

The pitcher had gone rather wild, and had permitted all the bases to fill.

Another man came to the bat, and the nervous pitcher shot one over.

"Ball one," yelled the ump.

The pitcher tried again.

"Ball two," was the decision.

Another effort by the hurler.

"Ball three," said the umpire.

The pitcher saw his predicament, and made one master effort to save the day.

"Ball four," yelled the ump, "and the man's out."

"How come, I'se out?" inquired the enraged batter.

"I'se repelled to put you out, nigger. Dont' you see dars nowhere else to put you?" reasoned the empire.

\* \* \*

Here's a helpful thought from the verses of Richard Lord, taken from the *Curtis Flyleaf*. It puts stress upon a fact which has the habit of fading into the subconscious era of our minds—the fact that the debit side of our ledger of life is made up of the things that we shirk. Its credit side is not for good intentions but for good deeds.

### The Ledger of Life.

It isn't the job we intended to do  
Or the labor we've just begun  
That puts us right on the ledger sheet;  
It's the work we have really done.

Our credit is built upon things we do,  
Our debit on things we shirk.  
The man who totals the biggest plus  
Is the man who completes his work.

Good intentions do not pay bills;  
It's easy enough to plan.  
To wish is the play of an office boy.  
To do is the job of a man.

# Up-to-the-Minute News Siftings

*Items of Interest to Dealers Gleaned from Many Fields.  
National and Local Business Plans, Problems, and Practices.*

## FORECASTS GOOD BUSINESS FOR REMAINDER OF YEAR.

Good business for the remainder of the year is the forecast made by Archer Wall Douglas, chairman of the committee on Statistics and Standards of the Chamber of Commerce of the United States, in his monthly report on crop and business conditions.

While conservatism and caution seem to be the keynote of business everywhere, says Mr. Douglas, there is no evidence of apprehension, except in a few unimportant quarters.

Mr. Douglas declares that events of the past weeks have borne out his previous predictions that the peak of high prices and business activity is past, and that he now looks to a long drawn out and somewhat painless readjustment of business.

Purchasing is liberal enough, but on a sane and sober basis of needs and not speculation, the report says.

Business conditions throughout the country are classified in the report as "fair" and "good."

About sixty per cent of the whole country is enjoying business described as "good."

On this point, the report explains that "the story begins on the far-away Pacific coast, where 'good' predominates despite the drouth which still afflicts much of California, the decline in ship-building, which is general in all the rest of the country, and the lack of cars to move lumber, which is the common complaint in every section of the country where lumber is an industry of any moment."

But the Pacific coast states, California in particular, long ago learned the lesson of diversification of production.

For they have all manner of agricultural products for their reliance, and likewise they ship fruits and vegetables in countless carloads to the eastern states.

Prices are high, production still keeps up, and there is a world-wide demand which seems difficult to satisfy.

The only fly in the ointment is the absence of "wild catting" because of contraction of credit by the banks with consequent slump in the demand for those commodities and supplies which this form of development and adventure demands.

This is felt particularly in Texas, where wild catting was the most engaging of pursuits, with all sorts of possibilities in both directions.

Industrial life is very busy, save that a cloud has appeared on the automobile horizon.

But it seems to presage very definitely lessened production in the near future, and probably different and more economical methods of distribution. Everything in the way of fabricated metals is full of business.

The great demand for concrete roads is making cement and paving brick almost unobtainable.

## Gets Trade-Mark Registered.

Under number 133,964, United States Patent Office registration has been granted to The Estate Stove Company, Hamilton, Ohio, for the trade-mark shown in the accompanying illustration. The Com-

*Estate*  
133,964.

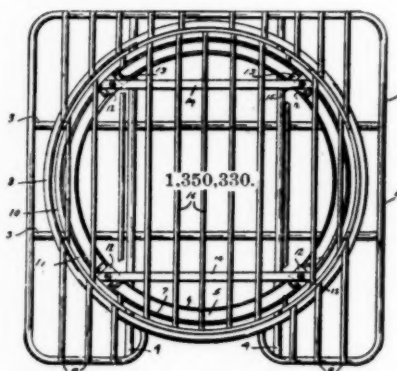
pany claims use of this trade-mark since February 1, 1880. The particular description of goods to which it is applied is electric air heating stoves, electric cooking stoves, and electric portable air heaters.

## Stove Company Is Incorporated.

The Cedar Grove Stove Company is the name of a recently incorporated concern, with a capital of \$100,000 which has purchased the plant of the old established Wisconsin Foundry and Steel Works at Cedar Grove, Wisconsin.

## Secures Patent for Turntable Rack for Ovens.

Ora Lee Partonnar, Kansas City, Missouri, has procured United States patent rights, under number 1,350,330, for a turntable rack for ovens described herewith:



A turntable rack for ovens, consisting of a portable shelf member, an annular channeled member mounted on said shelf member and having an inner and outer vertical flange, a circular guard disposed outwardly of and in a plane above said channeled member, a plurality of spaced apart rods connected between the ends of said shelf member and said guard and adapted for holding the latter elevated, and a turntable mounted on said shelf member and within said guard, said turntable comprising an annular vertical flange provided on its inner side with a plurality of pivotally mounted wheels traveling in said channeled member and a plurality of spaced apart parallel bars arranged on the upper edge of the flange and forming with the rods supporting said guard a grating for the rack.



# The Week's Hardware Record

*What Retailers, Jobbers, and Manufacturers Are Doing.  
Latest Selling Methods. Experiences of Successful Men.*

## COMPLETES PROGRAM FOR THE HARDWARE SPECIAL.

The Committee in charge of the Hardware Special train en route to Atlantic City, New Jersey, for the joint convention of the American Hardware Manufacturers' Association and the National Hardware Association of the United States, has decided to continue the program of former years.

For the convenience of delegates, visitors, and friends attending the combined conventions, arrangements have been made to operate from Chicago as in preceding years a train known as the "Hardware Special."

The line of travel to Atlantic City will be over the New York Central Railroad, Chicago to Albany, Hudson River Daylight Steamer, Albany to New York, and Pennsylvania Railroad Jersey City to Atlantic City, New Jersey.

The conventions will be held in Atlantic City, Tuesday, Wednesday, Thursday, and Friday, October 19, 20, 21, and 22, 1920.

The Hardware Special will leave Chicago via New York Central Railroad, LaSalle Street Station, Chicago, Sunday morning, October 17, 1920, at 10:25 o'clock.

It will be an all-steel train, an exact counterpart of the famous Twentieth Century Limited, consisting of a baggage, buffet, library car, standard Pullman sleepers, compartment sleepers, and two dining cars out of Chicago.

The Committee consisting of T. J. Usher (168 North Michigan Avenue), E. R. Swift, and R. B. Jones, has decided to make the trip on an all-expense plan, thereby eliminating special expenditures en route.

The rates will include transportation from the point at which the delegate boards the train through to Atlantic City, all means en route, Pullman accommodations to Albany, New York, and Parlor car from Jersey City to Atlantic City.

Ample staterooms will be reserved on the steamer for the ladies from Albany to New York. Members arriving from the west should purchase their transportation to Chicago only transferring their baggage to the LaSalle Street Station where it will be rechecked and go forward on the "Hardware Special."

The Committee states that it is informed that a notice has been sent out by other railroads advertising a special train through to Atlantic City for the convenience of delegates who wish to attend the hardware convention.

The railroads, of course, have a right to do so, but the Committee states that it feels that on account of the arrangements made for the comfort of all delegates while en route it is to their best interest to travel on the "Hardware Special."

Consequently, if any hardware folk who are going to the convention have made reservations to travel by any other route than that of the "Hardware Special" the Committee will greatly appreciate it if they would cancel their reservations and join the friendly and happy crowd that intends to go on the "Hardware Special."

A list of those on the "Hardware Special" and their location in the train will be handed to every delegate as the train pulls out of Chicago.

Elaborate preparations have been made for the comfort, and entertainment of the people traveling on the "Hardware Special."

The Committee calls particular attention to the pleasure in store for the delegates on the trip down the Hudson River, Monday, October 18, which will afford an excellent opportunity to get acquainted more intimately while viewing the beautiful and historic scenery of the Catskill Mountains and the Palisades.

## Opinions Differ Concerning Price Guarantee.

Telegrams continue to be received by the Federal Trade Commission, Washington, D. C., favoring the plan for a guarantee against decline in prices of commodities.

Responses to the questionnaire sent out by the commission to various business interests have also elicited many objections to the proposal.

It is contended generally by manufacturers and wholesalers opposed to the plan that the proposed guarantee against falling prices would encourage speculators and result in jobbers overbuying.

The subject will be discussed in Washington, D. C., October 5 when about 150 representatives of various industries meet with the Trade Commission on a trade practice submittal.

The Bolt, Nut & Rivet Institute, Pittsburgh, objects to the practice of price guarantee, commenting as follows:

"Expresses belief that such guarantee is practically option given buyer to accept or reject goods, depending upon prices at date of delivery as against prices at date of sale. Encourages speculative buying and inflates orders, creating artificial prices. Guarantee beyond date of shipment is vicious, as rebate in most cases is really additional profit. Such form of guarantee does not prevail in bolt, nut, and rivet industry. Guarantee effective until date of shipment is practiced in this industry and it is not regarded as being so pernicious, although it does introduce a speculative element in business. The institute would welcome the abolition of this practice. They do not believe reform can be brought about within the trade."

### Fix Dates of North Dakota Hardware Convention.

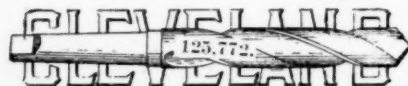
At a recent meeting of the Directors of the North Dakota Retail Hardware Association, it was decided to hold the next annual convention of that organization, February 8, 9, 10, and 11, 1921, in Fargo, North Dakota.

In connection with the convention, an exhibit is to be conducted in the Municipal Auditorium of that city during the first three days of the gathering.

The secretary of the North Dakota Retail Hardware Association, C. N. Barnes, Grand Forks, North Dakota, declares that the program of the forthcoming convention will be the best and most instructive in the whole history of the Association.

### Registers Trade-Mark for Boring Drills, Bits and Reamers.

Cleveland Twist Drill Company, Cleveland, Ohio, has been granted United States Patent Office registration number 125,772, for the trade-mark shown in the accompanying illustration. Registration for it was filed December 10, 1919, under a ten year proviso. The particular description of goods to which this trade-mark is applied is boring drills and bits of all kinds and reamers. The Company claims use of it since September 15, 1893.



### Make Two Additions to Their Factory.

J. H. Sessions and Son, Bristol, Connecticut, trunk hardware, are completing two additions to their factory, which will not only allow for increased production of their standard product, but also give additional room for some special lines, such as stampings, washers, burrs, rivets, etc.

### Gets Patent for Safety Razors.

Under number 1,351,712 and 1,351,713, United States patent rights have been granted to William A. Barry, of Little Rock, Arkansas, for safety razors described in the following paragraphs:

In a safety razor, a front plate, an adapter having means to engage a razor blade, and means on said front plate to prevent longitudinal and angular displacement of said adapter.



In a safety razor, a blade, superimposed members between which the blade is held, one of said members having a reduced central portion, means for positively positioning the blade with reference thereto, and means for

flexing the one member to slide the blade along the other member to vary the position of the edge of the blade with reference to said other member.

### Invents an Inserted Tooth Metal Saw.

In response to a long existent demand, an inserted tooth metal saw has been invented.

It is being placed upon the market by the Simonds Manufacturing Company of Fitchburg, Massachusetts.

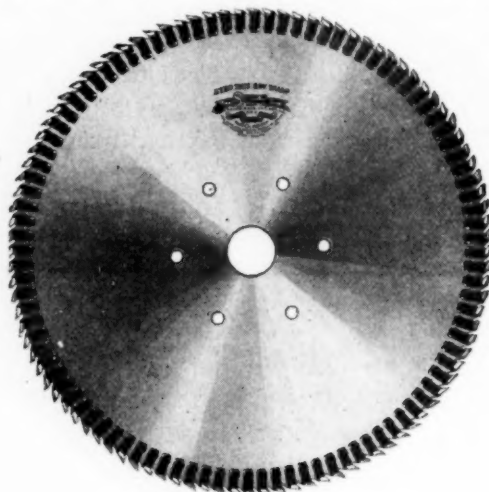
This saw, which is designated as No. 000, was especially designed to meet the requirements for a saw to cut structural iron, I-beams, channels, and stock

with thin walls which could not be as successfully cut with other saws of similar design for the reason that the pitch or spacing of the teeth was not fine enough to keep two teeth in the cut at all times in this work.

Through the arrangement and closer spacing of teeth, this new saw provides for smoother running.

It eliminates chatter, which is often the trouble where the teeth are placed farther apart in the plate.

The recently invented inserted tooth metal saw,



Inserted Tooth Metal Saw, Made by the Simonds Manufacturing Company, Fitchburg, Massachusetts.

which is shown in the accompanying illustration, is fast cutting.

It is fitted with as many teeth as it is possible to fasten securely into the plate in the Simonds' method of holding and at the same time retain the perfect alignment of teeth and strength of plate necessary to stand up and cut true.

These saws are now being made from 10 inches in diameter, with kerf of one-quarter inch and maximum of forty teeth, to fifty inches in diameter and 15/32 inch or 7/16 inch kerf with 210 teeth as maximum number.

Further details and prices to dealers can be had by writing to the Simonds Manufacturing Company, Fitchburg, Massachusetts.

Only a fool or a dullard refuses to yield in unimportant trifles where no principle is involved.



# Good Ideas for Window Display

*Practical Lessons from Exhibits in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.  
How to Get More Passers-By to Come into Your Store.*

## HUNTER AND BEAR DISPLAY INCREASES SALES.

According to scientists, the oldest form of civilization was that of the nomads or hunters. Ample proof is obtainable that the instincts of our ancestors persist for many centuries.

Our veneer of culture is thin enough to test the accuracy of the finest micrometer.

A remarkable virtue of the design is the clever use made of manufacturers' advertising poster.

It is nailed to the tree trunk so that it suggests a casual placard in the woods rather than a deliberate intrusion upon the scene.

As the designer describes the display, a glance at the hunter and the bear tells the whole story.

"The hunter has bunked in for the night with the



Graphic Window Exhibit Arranged by Anton F. Krema for the J. J. Stangel Hardware Company, Manitowoc, Wisconsin, Awarded Honorable Mention in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.

Close to the surface in all of us are the old promptings—the urge of the cave man, the yearning of the nomad.

The meekest man that ever pushed a pen across a bookkeeping ledger unconsciously throws his shoulders back and his head erect when he finds himself deep in the woods with a shotgun in his hands and wild game in sight.

There is, consequently, an elemental appeal in the window display reproduced in the accompanying illustration.

The scene teems with suggestions to the average passerby.

It is cleverly designed. Much credit is due to Anton F. Krema, who arranged it for the J. J. Stangel Hardware Company, Manitowoc, Wisconsin.

This window display was awarded Honorable Mention in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.

rifle beside him. He is aroused by a noise and wakes to find a bear licking up his leavings around camp and in his frying pan. He is in the act of reaching for his favorite gun to get his game."

The background is made of sign cloth painted with calcimine in rich colors.

The sky is of light grey with rolling clouds in the distance. The trees are dark green and the marsh a medium green.

The floor is covered with natural green moss and creeping hemlock in between.

A real stump with a few stones scattered about it and green moss add realism to the scene.

The pieces of firewood are burnt off at the ends and ashes scattered about to give the effect of a recently extinguished fire.

Interest in this window display was general.

Men, women, and children stopping to gaze at it and to make favorable comments on the scene.

An appreciable increase in the sales of guns, ammunition, and camping supplies resulted from this excellent window exhibit.

### **Registers Trade-Mark for Hammers, Hatchets, Axes and Sledges.**

Fayette R. Plumb, Incorporated, Philadelphia, Pennsylvania, has secured United States Patent Office registration, under number 133,019, for the trade-mark reproduced herewith. Registration for this trade-mark was filed May 27, 1920, and the Company claims use of it since August 1, 1917. The particular description of goods to which this trade-mark is applied is hammers, hatchets, axes, and sledges.



### **Buys a Partner's Interest in Hardware Store.**

With sixteen years of varied experience in the hardware business, J. A. Gilles has purchased the interest of A. M. Smith in the Smith and Wilhelm Company, 1723 Monroe Street, Madison, Wisconsin.

The firm carries a general line of hardware and pays particular attention to automotive accessories.

In connection with the business, a well equipped tinshop and house furnace installation department serve to widen the facilities for service to the customers.

Mr. Gilles is a close student of trade journals and considers them very helpful in the conduct of his business.

Realizing the tremendous sales possibilities of window displays he takes special pains to plan exhibits of commodities in this form of advertising.

He is making up a mailing list of prospective customers particularly among the farmers in his trade territory.

He has obtained very satisfying results from the use of slides in the motion picture machines at the community center in which his store is located.

Mr. Gilles is a member of the Masonic fraternity and is firmly convinced of the advantages to a merchant of active participation in fraternal organizations.

Business, in his opinion, is largely a matter of personal contact. The more friends and acquaintances the dealer makes, the greater will be his number of customers.

### **Letter Brings Back Customers.**

It costs money in advertising and service to gain customers.

Therefore, when a person quits trading with you, the loss includes the cost of winning his patronage.

Here is a letter which a Western dealer uses with much success to bring back customers to his store:

"It is so unusual for us to lose a customer that we can not account for your not having visited us during the past season.

"Despite every precaution on our part to avoid

cause for complaint about merchandise or service, there is no gainsaying that faults will sometimes develop.

"When brought to our attention, we spare no effort to make the necessary corrections or an adjustment so thoroughly satisfactory to the customer as to warrant no break in his patronage.

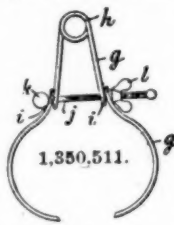
"Our sole fear is that some just complaint may be withheld from our notice.

"It is possible that you decided it was more advisable to make a change in dealers than to acquaint us with the cause of your dissatisfaction.

"Are we asking too much when we suggest an opportunity to make good any criticism or fault you may have found in your former relations with us?"

### **Gets Patent for Dividers, Calipers, and Like Instruments.**

Under number 1,350,511, United States patent rights have been obtained by John Henry Keeley Miller, Clapham, London, England, for dividers, calipers, and like instrument described herewith:



An instrument of the class described, comprising a single length of wire bent to form a spring looped at the top and bent also to form bolt-receiving loops in the legs, a threaded adjusting bolt passing through the loops in the legs and having nuts adapted to engage said loops.

### **Knives Are of Many Kinds.**

Cutlery is not all shears, scissors and pocket knives. There is a branch of the cutlery industry that finds employment in making cutlery for all kinds of industrial purposes, only faintly related to the more general uses of cutlery.

The butcher knife possibly is known to all American housewives, crowding in a butcher shop. But the butcher needs many knives of various shape and name. There is the beef shaver, the boning knife, the brisket knife, the chicken killing knife, and the ripping knife, to mention only a few.

Bakers have their special knives for the cutting of dough, there are candy knives, pastry knives, slicers, spatulas.

The grocer has a knife for cutting the large chunks of butter and possibly a trowel for the same purpose.

Large is the number of tool knives, including knives for artists, auto tire knives, broom corn knives, cane knives, collar knives, cork knives.

Cotton is sampled by aid of the cotton sampling knife.

The milliner uses a feather knife, the hatter a felt knife and the furrier and leather merchant have their own professional style of knife. Machettes are needed for cutting the cane upon the sugar plantation.

Painters and paper hangers have knives of their own choice and design.

The gardener knows the pruning knife, and the grafting knife. The rubber plantations have a knife suitable for tapping the rubber trees.

The shoe maker has his own knife and the shirt



maker, and who has not seen with interest and trepidation the great number of surgical knives displayed for the edification of the patient in any surgeon's office.

### **Use the Pocket Sales Book.**

The foundation of every retail accounting system is the pocket sales book, says the Members' Exchange of the Wisconsin Retail Hardware Association. The salesman carries it with him everywhere in the store.

Goods are sure to be charged no matter where the sale is made.

With the use of this book cash sales as well as credit sales are conveniently itemized.

Practice should be made of giving an itemized duplicate sales slip of cash sales to every customer.

The original is left in the cash drawer or filed on a spindle to be passed to the bookkeeper at the end of the day.

Itemizing cash sales insures goods being sold at the correct price.

Price cutting sometimes indulged in by clerks will be eliminated.

Mistakes in figuring up a customer's purchase can be corrected, because you have retained a copy of his purchases.

When you make your next purchase at one of the city department store, you will notice that every cash sale is itemized.

This is only one of the many ways they have of safeguarding their profits.

No! it does not take much of your time.

Anyway, you will be well paid for the time so spent.

It will insure accuracy in your dealings with your customer which will cement their trade to your store and bring you the good will of their friends as well.

### **Gets United States Patent Rights for a Saw.**

Kiyoshi Takano, Honolulu, Hawaii, has secured United States patent rights, under number 1,351,499, for a saw described herewith:



A saw having a plurality of grooves in each side thereof arranged to hold lubricant, said

grooves being of graduating lengths, the ends of said grooves terminating adjacent the edges of the saw.

### **Keep Your Windows at Work.**

Changing window displays is a matter of routine in most stores, but it is seldom that much attention is given to the day on which the change is made.

It depends largely on the character of the business district in which a store is located.

One store, which is on a street which is active with traffic on Sundays, always leaves the week-end display in the window until Tuesday.

Experience shows that people note a window dis-

play when passing on Sunday. The store is closed. The resolve to call Monday is natural, and frequently the store is identified by the goods on display, instead of by the name.

Thus, if the display remains until Tuesday, it affords those interested an opportunity to find the store without delay, and make their inquiries.

### **Gets Trade-Mark Registered For Locks and Bolts.**

Under classification number 25, namely, locks and safes, the Yale and Towne Manufacturing Company,



Stamford, Connecticut, has secured United States Patent Office registration under the official number 131,054, for the trade-

mark shown herewith. The particular description of goods to which it is applied is locks and parts thereof, screen door latches, secret gate-catches, screen door catches, cupboard turns, cupboard catches, mortise extension bolts, cupboard bolts and swing latches. The company claims use of this trade-mark since 1902.

### **Build Highways with Wire Mesh and Concrete.**

The problem of lasting and serviceable roads is in a fair way to satisfactory solution.

By using concrete with wire mesh reinforcing, the American Steel and Wire Company, Chicago, Illinois, has demonstrated that a seven-inch reinforced concrete road is stronger and better in every way than an eight-inch road without such reinforcing.

The cost of one inch of additional concrete will pay for the reinforcing wire mesh required.

The steel fabric keeps the parts of the slab from separating in case cracks are formed, also overcomes the danger of cracking due to spongy soil such as that of Illinois, or where there is improper drainage and otherwise defective foundations; also cracking due to changes of temperature. And finally, it affords the possibility of reduction in the thickness of the concrete slab.

Many millions of yards of wire mesh have been placed in roads North, South, East and West, and its use is increasing enormously. It meets all the requirements of a perfect road reinforcement.

It is made of cold drawn wire, the longitudinal members are 4 inches apart and securely spaced by diagonal cross members, the only kind of cross members which assist in distributing longitudinal stresses.

The fabric is so constructed as to give the degree of flexibility demanded where the slab to be reinforced is relatively thin, as in road work.

After many years of practical experiments and careful inspection of concrete roads in every part of the country, it is now the positive belief of every good concrete engineer that no concrete road should be built without being properly reinforced with a cold drawn wire fabric.

Many state road engineers in their standard specifications require wire reinforcing in all their concrete roads, and this demand is growing rapidly.

The standard specifications of the American Con-

crete Institute and the American Society for Testing Materials (the two societies of highest authority on concrete in the world) specify reinforcing and recommend it highly in every concrete road.

The indeterminate stresses set up in a concrete road by heat, cold and moisture conditions, as well as the concrete setting, produce contraction and expansion in the concrete, which in time tends to make unsightly and dangerous cracks which may eventually cause disintegration of the concrete and finally the failure of the entire road.

There is also always the danger of a sinking subsoil which brings about the same cracks unless proper amount of reinforcing is used.

### ***Buys a Hardware Store at Kiester, Minnesota.***

A deal has recently been closed whereby Robert Ellis becomes the owner of the hardware stock of G. Baker, Kiester, Minnesota.

Mr. Ellis has had excellent training in the selling end of the hardware business, having been a hardware clerk for a number of years.

He carries a general line of hardware, including automotive accessories, guns, ammunition, and sporting goods.

In connection with the business a tinshop and house furnace installation department are successfully conducted.

Mr. Ellis is intensely interested in the good roads movement.

He realizes that the welfare and progress of the merchants of his state are dependent to a considerable degree upon efficient highways.

He is thoroughly convinced of the manifold advantages of trade journals in keeping retailers informed of improvements in merchandising and of other matters of importance to the trade.

### ***Counts Taxes Paid on a Nail.***

The story of a nail, as told by the National Association of Credit Men—one of many reasons why our tax laws should be revised—for what is true of the nail applies to most other necessities:

Tax 1. Paid by the company which mines the iron ore.

Tax 2. Paid by the company which carries the ore to the port on Lake Erie.

Tax 3. Paid by the dock company which unloads the ore.

Tax 4. Paid by the railroad company which carries the ore to the blast furnace.

Tax 5. Paid by the blast furnace which smelts the ore.

Tax 6. Paid by the steel mill which transforms the pig iron into steel.

Tax 7. Paid by the factory which makes the nail.

Tax 8. Paid by the wholesale hardware house which buys the nail from the factory.

Tax 9. Paid by the retail hardware dealer who sells the nail to the ultimate consumer.

Pyramiding is dangerous.

### ***Customer Is Source of All.***

The customer is the chief essential—without him there would be no business, no livelihood for the salesman and no profit for the employer.

So the act of waiting on a customer, determining what he wants, and filling that want, is the most important part of the day's work.

Small wonder therefore, that merchants who have built up a monumental business of wide repute insist that their salesmen ever regard the customers' rights and feelings as paramount—important above anything else in the business.

So far is this policy carried out that the familiar instances of "the customer is always right" is the guiding motto of many of the most successful stores in this country.

The policy is carried out regardless of the fact that it is inevitable that from time to time some customer may take advantage in an unfair manner of so broad a policy, and intentionally defraud the dealer.

The fraud may be evident, and yet the deception is tolerated by the store management in the feeling that the very fact of the deception being passed by will put that customer on his honor in the future.

### ***Plans to Erect New Plant.***

The Western Manufacturing Company, Evans Block, Denver, Colorado, manufacturer of locks, bolts and other hardware products, is arranging for the erection of a new plant to cost about \$200,000, including equipment.

### ***Trade Acceptance Is a Brake on Over-Buying.***

Indications from all parts of the country are to the effect that manufacturers and merchants generally are contenting themselves with a more stable and conservative volume of business. They realize the determination of consumers to combat high prices by reducing purchases.

The orgy of extravagant buying is over, and it behooves every merchant to guard carefully against laying in a larger stock than his market promises to absorb.

Now, it seems to us well worth while to note in this connection that under the credit arrangement by which so many of our merchants buy to fill their shelves, there is temptation to lay in more than is necessary and wise.

Of the various commercial sins, none more largely contributes to business mortality than that of over-buying.

Under the open account method, which is the credit arrangement we have particularly in mind, the date of maturity is indefinite, even though definitely fixed in the sales terms, for oft repeated violations of these terms cause a large percentage of buyers to assume the probability that it will not be necessary to pay at the time agreed upon.

Hence the fact that numerous merchants buy in a slipshod manner, feeling that, if their stocks are not



turning over promptly enough, they can obtain extensions from their creditors.

It becomes more evident in a time such as American what is needed in merchandise transactions is a credit business has passed through in recent months, that arrangement which the buyer of goods will respect, which will act as a check against over-buying, and as a balance for the over-energetic salesman.

The experience of intelligent users of the trade acceptance has been that this instrument accomplishes these things: It curbs the practice of over-buying—or, more correctly, it stabilizes buying.

A credit manager recently remarked that "the easy buyer is the slow payer, while the man who buys carefully is the man who turns his stock of merchandise most frequently—the kind of merchant who is a success to himself and a credit to the business community."

The trade acceptance is given by that kind of merchant, if he buys on time.

### ***Increases Its Capital Stock.***

The North and Judd Manufacturing Company, New Britain, Connecticut, manufacturer of hardware specialties, has increased its capital stock \$500,000, making the total outstanding stock \$2,000,000.

### ***Hardware Dealer Incorporates His Business.***

After twenty-three years of successful management, T. B. Shannon, Iola, Kansas, has incorporated his business under the name of T. B. Shannon Company.

There is no actual change in the personnel of the establishment. Mr. Shannon is the controlling stockholder. The balance of the shares has been sold to employees who have been with him for years.

The newly incorporated company will not continue the policies of the business, which includes a well equipped tinshop, hardware, stoves, paints, implements, tractors, and trucks.

### ***Use Manufacturers' Helps.***

Manufacturers of the various lines entering into the stock of the average hardware store are probably as generous as they are in any field when it comes to providing sales helps to aid the dealer in moving his stock.

The packers were probably more generous than any one else in the days before the Federal Trade Commission got after them and required that steps be taken to divorce the packing business from the many side lines which had crept into the average packer's distribution plans.

In that particular field there has been undoubtedly a great deal of waste because of the large variety of material furnished by all producers and distributors.

The window displays, window cards, cutout, easels, display assortments, etc., which are available to the modern hardware store are as a rule much too good to be used once only and then thrown away.

Generally they have a good application the year

around and can readily be repeated within three months or six months without causing them to seem stale.

While intended for use as an individual display for some given line of merchandise, it frequently happens that subjects are appropriate and designs and coloring in harmony so that a mixed display can be worked up, revealing the sales helps of several different manufacturers.

This adds a desirable variety to the window and at the same time makes sure that the window display material is given conscientious and effective use.

## ***Trade Opportunities in Foreign Lands.***

The Bureau of Foreign and Domestic Commerce, through its Special Agents, Consular Officers and Commercial Attachés, is receiving information of opportunities to sell hardware and kindred lines in several foreign countries. Names and locations will be supplied on request to the Bureau in Washington or its District Offices. Such requests should be made on separate sheets for each opportunity, stating the number as given herewith:

33713—A firm of commission agents in India desire to get in touch with American firms for the importation of hardware of all kinds, wire goods, vises, anvils; enameled ware; corrugated iron sheets, plain galvanized sheets, brass and copper sheets and rods, motor cars, and motorcycles and parts; and general sundries. Agencies are desired in these lines for their sales in British India, Burma, and Ceylon. No reference offered.

33717—The representative of a company in India is in the United States and desires to secure an agency and purchase iron and steel products, brass and copper sheets, paints, etc. Reference.

33710—An American export and import house with connections in France desires to receive information, prices, etc., on agricultural equipment of all kinds. Exclusive agency propositions are requested. Payments to be made against documents in the United States.

33711—A commercial agent in Turkey desires to be placed in communication with firms for the sale of American goods in that country. Quotations should be given c. i. f. Turkish ports. Payment to be made through bankers. No reference given.

33712—A firm of commercial agents in Uruguay desires to secure an agency for the sale of automobiles and accessories. Quotations should be given c. i. f. Uruguayan port. Payment to be made against documents. Correspondence may be in English. References.

33722—A firm of importers in India desire to secure an agency for the sale of hardware of all kinds, wire goods, vises, anvils, files, tool and spring steel, enameled ware, brass copper sheets and rods, etc., and sizing materials. Reference.

33723—A commercial agent in Italy desires to secure the representation of firms for the sale of hardware, etc. Reference.

33725—An agency is desired by a merchant in Italy for the sale of hardware, kitchen and general utensils, etc.

33726—A firm of general distributors in South Africa desire to secure an agency for the sale of American goods. Reference.

33729—A mercantile firm in India desires to purchase and secure an agency for hardware, motor cycles, bicycles, and motor attachments, enamelware, etc. Quotations should be given c. i. f. Indian port. Payment to be made through bank. Reference.

33730—A firm in Ireland desires to purchase blue fine-cut tacks for upholsterers' use. Quotations are requested per pound and per hundredweight of 112 pounds. No reference offered.

33733—A merchant in Austria desires to establish relations with manufacturers with a view to securing an agency for the sale of American goods, particularly automobile tires and fittings. Reference.

33737—An agency is desired by an inquirer in Italy for

the sale of saws, motors, automobiles, and accessories. Correspondence should be in Italian, though English may be used. References.

33738—A mercantile firm in Mexico desires to purchase a carload of common wire nails of assorted sizes. Quotations should be given c. i. f. El Paso, Tex. Payment to be cash against documents. Correspondence may be in English. References.

33739—A firm of manufacturers in Austria desires to get in touch with manufacturers with a view to securing an agency for the sale of automobile tires. Reference.

## Coming Conventions.

American Hardware Manufacturers' Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, October 20, 21, and 22, 1920. F. D. Mitchell, Secretary-Treasurer, 4106 Woolworth Building, New York City.

National Hardware Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, October 20, 21, and 22, 1920. T. James Fernley, Secretary, Philadelphia, Pennsylvania.

American Washing Machine Manufacturers' Association, Hotel Sherman, Chicago, Illinois, November 10 and 11, 1920. E. B. Seitz, Secretary, 10 South LaSalle Street, Chicago, Illinois.

Automotive Equipment Association, Coliseum, Chicago, Illinois, November 15, 16, 17, 18 and 19, 1920. William M. Webster, Commissioner, 1813-1818 City Hall Square Building, Chicago, Illinois.

Automobile Accessories Branch of the National Hardware Association, Coliseum, St. Louis, Missouri, November 30, December 1, 2, and 3, 1920, headquarters, Hotel Statler. T. James Fernley, Secretary-Treasurer, 505 Arch Street, Philadelphia, Pennsylvania.

Southern Association of Stove Manufacturers, Evansville, Indiana, December 6 and 7, 1920. W. H. Cloud, Secretary, 216 Glendora Avenue, Louisville, Kentucky.

Texas Hardware and Implement Association, Adolphus Hotel, Dallas, Texas, January 18, 19, and 20, 1921. A. M. Cox, Secretary, 1808 Main street, Dallas, Texas.

Western Retail Implement, Vehicle and Hardware Association, Kansas City, January 18, 19 and 20, 1921. H. J. Hodge, Secretary, Abilene, Kansas.

Pacific Northwest Hardware and Implement Association, Seattle, Washington, January 18, 19, 20, and 21, 1921. E. E. Lucas, secretary, Hutton Building, Spokane, Washington.

Missouri Retail Hardware Association, Planters Hotel, St. Louis, Missouri, January 25, 26, and 27, 1921. F. X. Becherer, secretary, 5106 North Broadway, St. Louis, Missouri.

Indiana Retail Hardware Association, January 25, 26, 27 and 28, 1921. (Place to be announced later.) G. F. Sheely, Secretary, Argos, Indiana.

Oregon Retail Hardware and Implement Dealers' Association, Portland, Oregon, January 25, 26, 27, and 28, 1921. E. E. Lucas, secretary, Hutton Building, Spokane, Washington.

Kentucky Hardware and Implement Dealers' Association, Louisville, Kentucky, January 25, 26, 27 and 28, 1921. J. M. Stone, Secretary, Sturgis, Kentucky.

Nebraska Retail Hardware Association, Hotel Rome, Omaha, Nebraska, February 1, 2, 3 and 4, 1921. George H. Dietz, Secretary, Lincoln, Nebraska.

Wisconsin Retail Hardware Association, Milwaukee, Wisconsin, February 2, 3 and 4, 1921. P. J. Jacobs, Secretary, Stevens Point, Wisconsin.

Oklahoma Hardware and Implement Association, Oklahoma City, February 8, 9, and 10, 1921. W. B. Porch, secretary-treasurer, Oklahoma City, Oklahoma.

The Michigan Retail Hardware Association, Grand Rapids, Michigan, February 8, 9, 10, and 11, 1921. Arthur J. Scott, Secretary, Marine City, Michigan.

Iowa Retail Hardware Association, Des Moines, Iowa, February 8, 9, 10, and 11, 1921. A. R. Sale, secretary-treasurer, Mason City, Iowa.

North Dakota Retail Hardware Association, Fargo, North Dakota, February 8, 9, 10, and 11, 1921. C. N. Barnes, Secretary, Grand Forks, North Dakota.

Pennsylvania and Atlantic Seaboard Hardware Association, Incorporated, Convention and Exhibition, Philadelphia Commercial Museum, Philadelphia, February 8, 9, 10, 11, 1921. Sharon E. Jones, Secretary, 1314 Fulton Building, Pittsburgh.

Illinois Retail Hardware Association, Hotel Sherman, Chicago, Illinois, February 15, 16 and 17, 1921. Leon D. Nish, Secretary, Elgin, Illinois.

California Retail Hardware and Implement Association, San Francisco, California, February 15, 16, and 17, 1921. LeRoy Smith, secretary, 112 Market street, San Francisco, California.

Minnesota Retail Hardware Association, St. Paul Auditorium, St. Paul, Minnesota, February 15, 16, 17, 18, 1921. H. O. Roberts, Secretary, Metropolitan Life Building, Minneapolis, Minnesota.

Ohio Hardware Association, Columbus, Ohio, February 15, 16, 17 and 18, 1921. Hotel Headquarters, Deshler Hotel.

Exhibition in Memorial Hall. James B. Carson, Secretary, Dayton, Ohio.

New England Hardware Dealers' Association, Mechanics' Building, Boston, Massachusetts, February 21, 22, and 23, 1921. George A. Fiel, secretary, 10 High street, Boston, Massachusetts.

New York State Retail Hardware Association, Rochester, New York, February 22, 23, 24, and 25, 1921. John B. Foley, Secretary, 607 City Bank Building, Syracuse, New York.

South Dakota Retail Hardware Association, Sioux Falls, South Dakota, February 22, 23, 24, 25, 1921. H. O. Roberts, Secretary, Metropolitan Life Building, Minneapolis, Minnesota.

Panhandle Hardware and Implement Association, Amarillo, Texas, May 8, 9, and 10, 1921. Troy Thompson, Secretary, Treasurer, Dalhart, Texas.

Hardware Association of the Carolinas, Charlotte, North Carolina, May 10, 11, 12, and 13, 1921. T. W. Dixon, secretary-treasurer, Charlotte, North Carolina.

Southeastern Retail Hardware and Implement Association (composed of Alabama, Florida, Georgia and Tennessee), Atlanta, Georgia, May 17, 18, 19 and 20, 1921. Walter Harlan, Secretary, 701 Grand Theater Building, Atlanta, Georgia.

## Retail Hardware Doings.

### Kansas.

J. A. Hubenett has purchased from his brother, C. H. Hubenett, at Little River, a half interest in the Lindsberg Hardware Company at Lindsberg.

The Farmers' Cooperative Grain Company have purchased the O. E. Reed stock of implements and repairs at Blue Rapids.

H. M. Marshall has purchased the interest owned by G. L. Dickie in the hardware firm of Dickie and Marshall at Grenola.

### Minnesota.

I. A. Wideman and A. B. Prosser of LaPorte have formed a partnership in the hardware and implement business and will go under the firm name of Wideman and Prosser.

### Missouri.

J. O. Hall has purchased the Mexico Hardware and Furniture Company at Mexico.

L. R. Mann of Fayette has sold his hardware store to W. Roberts of Lewiston.

Lloyd Atwood recently moved his stock of hardware from Lone Star into the Owings' building at Albany.

The stock of hardware of E. D. Waller or Rich Hill together with the double brick business building on Park Avenue was sold to T. J. Brown of Erie, Kansas, the consideration being \$50,000.

J. S. Perkins and R. L. Gooch have sold the Mexico Hardware and Furniture Company to J. O. Hall of Mexico.

### Nebraska.

G. R. Fletcher has bought a hardware store at Monroe. Johnson and Skalowsky partnership has been dissolved. T. W. Johnson becomes sole owner of the former Degner Hardware Company and Ben Skalowsky resumes full ownership of the tin and sheet metal work department at Norfolk.

R. C. Buckley, who for a number of years has been conducting a hardware store in York, has sold his entire business to Mitchell and Son of Hebron.

### Oklahoma.

The Corn Implement Company have sold their entire stock of merchandise and their property to Duerksen Hardware Company at Weatherford.

### South Dakota.

U. B. Iwerks has sold his hardware store at Woonsocket to Wolter and Colligan.

### Texas.

George McDaniel has sold his hardware store at Georgetown to Lundblad Brothers.

R. B. Bennett and C. J. Cobb are opening a hardware store in Mexia.

F. Toma is opening a hardware store in East Bernard. Smith and Johnston have opened a new hardware store on the west side of the Square at Honey Grove.

### West Virginia.

Princeton Hardware Lumber Company, Princeton, operations in Sady Springs district of Raleigh county, have been incorporated with a capital stock of \$25,000 by R. B. Vermillion, L. C. Rogers, R. N. Vermillion, and L. S. Vermillion all of Princeton.

### Wisconsin.

N. E. Forward and Son are moving their hardware business into new quarters at Birchwood.



# Selling Automotive Accessories

*How Hardware Dealers Can Increase Their Profits by Handling Standardized Automotive Accessories. Facts and Suggestions to Aid Them in Giving Better Service.*

## TAKE GOOD CARE OF TUBES.

"Box worn" means about the same thing in auto inner tubes as "shop worn" means in clothes.

Both are damaged goods.

When an inner tube leaves a rubber factory, it is ordinarily packed in waxed paper and placed in a box to keep it in perfect condition from factory to customer.

But this waxed paper packing which is so essential to insure its resiliency and elasticity—in other words, its live quality—is not intended to be the packing which will protect the tube carelessly thrown in the tool box of a car.

A motorist will always find in the roadside emergency, that his tubes are in the same serviceable condition as when he placed them in the car, if he will carefully wrap them in soft cloth or paper so that they can not slide around in the wrapping.

Better even than this, however, is the purchase of a tube bag.

It is not only excellent but cheap insurance against tube cutting and chafing.

## Shield Visor for Automobiles Is Profitable Accessory.

Serious accidents are known to have occurred to drivers of automobiles who became confused by the glare of sunlight when driving.

There is, no doubt, therefore, that a profitable demand can easily be developed for a device such as that of the Doty Shield Visor shown in the accompanying illustration manufactured by the Auto Radiator Shutter Company, Dayton, Ohio.

This is an adjustable shield fitted to a wind shield.

Not only does it protect the driver from the glare of the sun during the day, but it also guards him against being blinded or confused by the glare from approaching headlights at night.

The inner side of the Doty Shield Visor is of green color—very restful to the eyes.

This device has another advantage, namely, during a rain or snowstorm it keeps the windshield clear enough for the driver to see the road ahead.

Dealers in automotive accessories who are alert to money making additions to their stock would do well to get in communication with the manufacturers of the Doty Shield Visor and write for terms and particulars to the Auto Radiator Shutter Company, Dayton, Ohio.

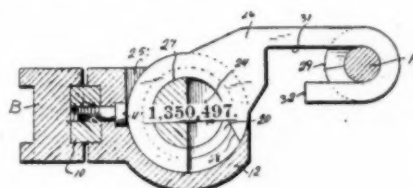
## START ACCESSORIES DEPARTMENT.

After a careful survey of the general situation in your town and an investigation of the local garages, a small stock of accessories can be put in with reasonable assurance that they will find a ready sale.

The merchandising of accessories is the same story as selling hardware. It's simply a question of knowing the goods you sell, buying right and conservatively, and using the same forceful salesmanship which turns over your hardware stock.

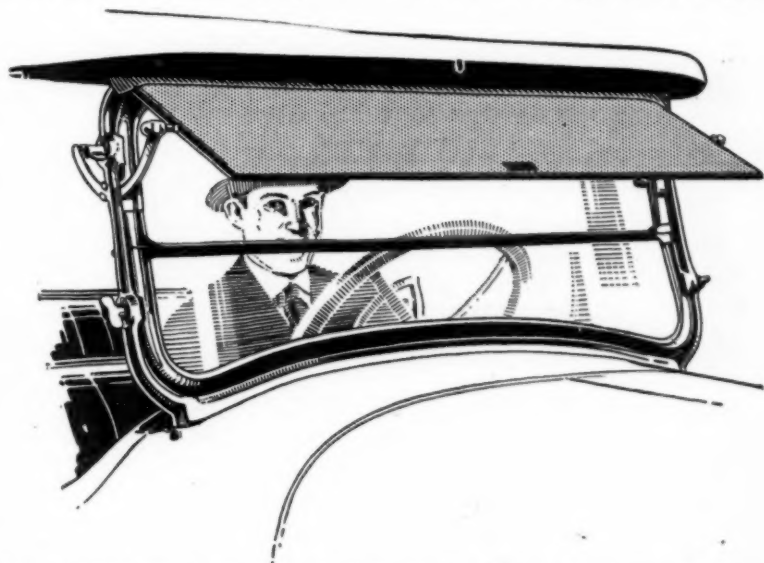
## Is Granted Patent Rights for An Automobile Lock.

Under number 1,350,497, United States patent rights have been granted to Louis B. Halliday, Cincinnati, Ohio, for an automobile lock which is described in the following:



An automobile lock comprising a lock casing, a key-actuated locking member rotatably in the casing, and a hasp

having a head adapted to be engaged by said locking member and locked from detachment from said locking member by a rotation of the locking member a pre-



Doty Shield Visor, Made by Auto Radiator Shutter Company, Dayton, Ohio.

determined distance in one direction, said hasp at the end opposite said head being longitudinally slotted and having an opening extending from the edge face of the hasp into said slot at the inner end of the slot.

There are, indeed, few real directors.

# Advertising Help and Comment

*Send Us Copies of Your Advertisements. Let Us Help You Get Bigger Results by Advice and Suggestions. The Service Is Free. Don't Hesitate to Take Advantage of It.*

It is a good advertisement of the Dockash 2-Fuel Range which the Burnet Street Stove Store published in the *Daily Press* of Utica, New York.

The illustration gives a fairly

The arrangement of type in this advertisement affords all needed emphasis.

One objection, however, presents itself in this connection.

It will be noted that in the light-

enough reason for closing a sale.

But the combination in close and logical union of price and quality is an almost irresistible force in merchandizing.

The reader with an advertisement in front of him in the newspaper is not a different person from the same reader standing in front of your counter in the store.

He is just as much interested in the relation of price and quality when he reads your advertisement as he is when he comes to your store to buy goods.

\* \* \*

A model of carefully designed copy is shown herewith in the reproduction of the advertisement of the Winchester Store of Providence, which occupied a space two columns wide by six and one-quarter inches deep in the *Evening Bulletin*, of Providence, Rhode Island.

This advertisement has the prime virtue of being newsy.

Every effective advertisement is essentially a piece of news.

The Winchester Store copy picks out five articles, presents

**SEE THE DOCKASH 2-FUEL**



**THE LATEST IN RANGE CONSTRUCTION**

BAKES, COOKS, FRIES, HEATS WATER WITH EITHER GAS OR COAL PERFECTLY

TAKES ONLY 36 INCHES OF FLOOR SPACE

COME IN AND LET US DEMONSTRATE THE MANY OTHER FEATURES OF THIS COMPLETE RANGE

WE TAKE OLD STOVES IN TRADE AND SELL ON EASY TERMS

"The Range That's Different"

**Burnet Street Stove Store**

Phone 2886

502-504 Burnet Street

clear idea of the appearance of the stove.

In these days of small rooms and still smaller kitchens, it is an advantage to have a stove which takes only twenty-six inches of floor space.

Hence, that feature of the range is worth mentioning in the advertisement.

The brief sentence telling what the range does is well worded.

Always it is good selling psychology to invite prospective customers to one's store for a demonstration.

The Burnet Street Stove Store is to be commended for embodying such an invitation in the text.

Another feature which has a strong influence on everyday folk in the statement that the store takes old stoves in trade and sells on easy terms.

face type only capital letters are used.

Experience has proved beyond a doubt that where all capital letters are used it is harder to read the words.

It must be remembered that one of the important details in the preparation of copy is to use every device of printing which will make the text easy to read.

The easier the message is delivered to the eye and the brain the less opposition it encounters.

This is a point worth keeping in mind by merchants in making up their advertisements.

\* \* \*

**Connect Quality with Your Prices.**

Price alone is not sufficiently conclusive as a selling argument.

Quality alone is not a strong

**THE WINCHESTER STORE**

Hardware  
Spring Goods  
Cuts
Tools  
Automobile Accessories  
Amusement
Cutlery  
Household Specialties

**To-day's News Items**

It is a good plan to watch for news from The Winchester Store. If you want poor merchandise at little prices, do not come here. But if you want high grade dependable merchandise at fair prices, then this is a good store in which to make your purchases.

One lot of Riveting Hammers of tool steel, first quality, each	75c
An assorted lot of first grade Auger Bits, each	35c
A. C. "Titan" Spark Plugs, all sizes, very specially priced Thursday and Friday at	85c
Fibre Serving Trays, 14-inch, black or white enameled, special Thursday and Friday	\$1.00
"Lyknu" Auto Polish—4-oz. size, Thursday and Friday, special at	40c
8-oz. size, Thursday and Friday, special at	90c

**The Winchester Store of Providence**  
Westminster and Snow Streets

them in bold type with unmistakable price quotations and contrives to give an impression of variety and reasonable economy.



# Warm Air Heating and Ventilating

*Better Installations. How to Sell More Warm Air Heaters.  
Reports of Progress in Warm Air Heater Research Work.  
Ventilating Factories, Garages, Theaters, and Houses.*

## THIN SHEETS OF ASBESTOS RESULT IN A WASTE OF HEAT.

Although much publicity has been given to the tests carried on in the Warm Air Furnace Research Bureau, University of Illinois, there are many persons who are yet unfamiliar with the main conclusions.

Some of these conclusions require a radical change in the custom of covering warm air heater pipes.

Bulletin No. 117 of the Engineering Experiment Station, University of Illinois, by V. S. Day, deals with the "Emissivity of Heat from Various Sources." Here are its facts with regard to heat losses of warm air pipes:

The use of thin sheets of asbestos paper on bright tin heat pipes results in a waste of heat. The use should be abandoned.

Uncovered bright tin pipes are more efficient carriers of heated air than asbestos paper-covered bright tin pipes.

This fact is true regardless of the degree of brightness of the tin surface.

No small number of applications of asbestos paper will suffice as an insulator. Several thicknesses are necessary to make a covering equal in this respect to the bare tin.

The accumulation of dust and dirt on the pipes does not greatly alter the amount of the loss.

The heat loss from warm-air furnace pipes covered with one layer of asbestos paper is a serious item in the cost of heating, amounting to more than 5 per cent of the coal consumption, depending upon the number and size of the pipes used.

The fact that pipes are partly protected from convection currents of air by joists and studding does not greatly affect the loss.

*Unless the insulation excels the uncovered bright tin in heat insulation properties it should not be used.*

Such materials are available and the tests have shown their merits.

## Expresses Doubt as to a Shortage of Coal.

There is reason to fear that a good many people assume that there is a coal shortage because prices remain exorbitantly high—more than half a dozen times higher than the low levels that were reached at various times before the war.

That represents a serious error in reasoning in the first place, and furthermore it betokens a very dangerous philosophy.

If men make a mistake about coal by this method they are likely to make many mistakes about other things.

Is a shortage of clothing proved by retail prices being high and woolen mills closed?

How many industries have been forced to curtail production of late, directly on account of inability to get coal?

Here and there a plant may be closed or operating at a reduced rate because its owners can not afford to pay, or do not choose to pay, the prices asked for coal, but that is another matter.

Such actions tend to increase the supply for others.

## Issues Attractive Catalog.

The red glow in the windows of the snow-covered cottage on the cover of the latest catalog of the Cooperative Foundry Company, Rochester, New York, suggests coziness and comfort.

The catalog itself, which is devoted to the Red Cross Empire Pipeless Furnace, makes interesting reading.

It is well illustrated with full views and sectional views of the Red Cross Empire Pipeless Furnace.

In the latter half of the catalog are shown various types of buildings, including one containing fifty-two windows below the roof, which have been successfully heated by the Red Cross Empire Pipeless Furnace.

Copies of this catalog may be had upon request to Cooperative Foundry Company, Rochester, New York.

## Has New Process for Using Lignite as Fuel.

A new Australian syndicate has been registered at Melbourne "to mine, process and deliver to prospective customers throughout the commonwealth" pulverized lignite, or brown coal, which, it is claimed, can be used for steam generation or metallurgical purposes with most satisfactory results.

The syndicate controls various brown coal deposits throughout the state of Victoria, said to contain over 250,000,000 tons, and mining operations are well under way.

The most striking improvement in this new method of treating lignite, which is known as the "Buell system," is the means of air drying at the mines, whereby the moisture content is reduced from 50 to 25 per cent in seven days. Briefly described, the process is as follows:

The lignite is mined in either shafts or open cuts, the coal crushed on the spot to egg size, then hoisted to the air drying tipples at the surface by bucket conveyors.

After drying about seven days, the coal is relieved of practically half of its moisture content and is ready for final treatment.

This final process, which should be undertaken near

the place where the fuel is to be used, consists of again crushing the coal—to about  $\frac{1}{2}$  inch mesh—after which it is passed through a rotary drier, where the moisture content is reduced to about 10 per cent.

The fuel is then pulverized, separated by air and stored in bunkers.

To use it is blown through pipes, where it is mixed with air in quantity 10 per cent in excess of requirements and ignited at the tip of an adjustable burner, which enables the length and width of the flame zone to be most accurately gauged.

Boiler tubes and baffles are kept clear of ash by soot blowers and suction conveyors carry off the ash to any desired place of disposal.

Three per cent of the power generated is required to operate the plant, and one experienced man can fire a whole battery of boilers or kilns.

Under test the boiler efficiency was 80 per cent, the furnace efficiency 78 per cent.

### ***Produces New Furnace in Its New Foundry.***

With ample facilities for careful workmanship and efficient production, the Modern Way Furnace Company, Fort Wayne, Indiana, is successfully carrying out the manufacture and marketing of its new type of "Modern Way" furnaces under its own supervision and direction.

A special improvement Sectional View of Straight Firepot and of the new product Patented Air Jets of the New Modern Way Furnace.

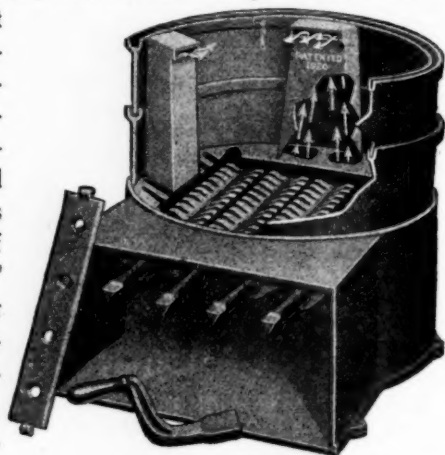
for increasing the percentage of combustion. In the sectional view of the straight side fire pot shown in the accompanying illustration with its interchangeable triangulation bar grates, the patented air jets are evident.

These patented air jets can be removed or replaced in a moment's time, leaving the regular straight side fire pot when it is desired to burn hard coal or wood.

One of the uncommon advantages claimed for the patented air jets is that they permit the delivery of pre-heated air to the top of the fire and that they do not become clogged with ashes which would cut off all or part of the air supply.

Other desirable devices have been added to the new type of "Modern Way" furnaces and full particulars and prices may be had by addressing the Modern Way Furnace Company, Fort Wayne, Indiana.

"It is not a question of how much we are to do, but of how it is to be done; it is not a question of doing more, but of doing better."—John Ruskin.



### ***Adds Furnace Repairs to Its Extensive Stock.***

In response to a constantly growing demand, the National Stove Repair Company, of Miamisburg, Ohio, has added a complete line of warm air heater and boiler repair patterns to its extensive stock of stove and range patterns.

A comprehensive assortment of these repair patterns will be kept on hand at all times so that the company may be able scrupulously to live up to its motto of quick shipments.

The National Stove Repair Company is the successor of the John B. Morris Foundry Company, Cincinnati, Ohio, having purchased all the patterns of that company about a year ago.

In addition to its main plant at Miamisburg, Ohio, the National Stove Repair Company maintains a large branch establishment in Cincinnati, Ohio.

### ***Good Management Is Essential to Success in Business.***

Every business man knows that the possibility of failure is something he must take into his calculations. This does not mean that he expects to fail. It means that he intends not to fail.

Every week brings him his problem. Every year brings an emergency of some sort. And far more often than is realized by people who are not in business there comes some actual crisis which has to be met.

If the famous saying, "Life is just one jammed thing after another" was not originated by a business man, it isn't because commercial life does not fit that description.

Yet the number of reported failures, compared with the number of men and firms engaged in business, is very small. And there has never been a time in the history of the United States when this percentage was as low as it has been during the past year.

This apparent immunity is largely due to the fact that prices have been rising steadily for four years. And it is in a period of declining prices that the real test comes to most financial structures.

The individual man cannot control these outside conditions which, of course, increase the difficulty of carrying on any business whatever. But if a concern is sound within itself, and if it is managed wisely, it can generally weather the storm. Whereas, if it is not sound, if there are radical faults in management, it may fail even when outside conditions are favorable.

### ***Pay Yourself a Salary.***

Do you pay yourself a regular salary?

No matter if you are in business for yourself, what of it?

You should take every Saturday night as much as you could earn by the same effort if you worked for some one else.

Then charge yourself up at cost price, with anything you use out of the business.

That is the only way to keep matters satisfactory and to know at the end of the year whether you have gained or lost.



# Practical Helps for Tinsmiths

*No Two Jobs Are Exactly Alike. Therefore, the Sheet Metal Worker Has to Meet Each Difficulty as It Comes. Send Your Problems to Us. Let Our Experts Help You.*

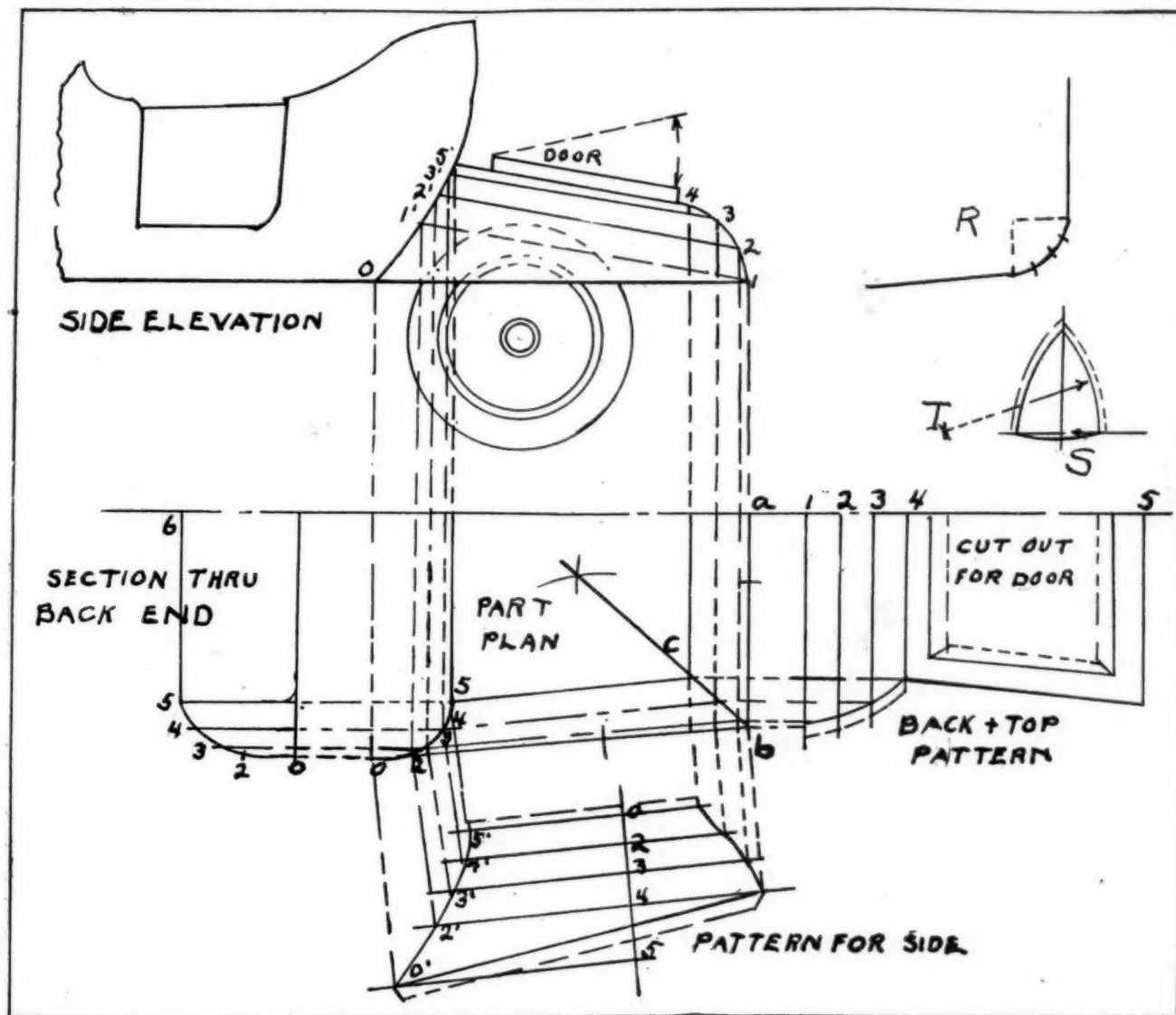
## PATTERNS FOR BACK BODY.

By O. W. Kothe, Principal St. Louis Technical Institute and Instructor in the David Rankin, Jr., School of Mechanical Trades, St. Louis, Missouri. Written especially for American Artisan and Hardware Record.

The automobile industry employs thousands of sheet metal workers to do repair work, and specialty

angle a-b-o as desired. Then bisect this angle, and draw the miter line b-c. From each point as 1-2-3-4 of elevation, drop lines into miter line of plan.

Then from these points extend them parallel to b-c, and from points 5-3'-2'-1'-o of elevation drop lines into plan, thereby intersecting those in plan of similar number. This enables tracing the miter line 5-o



Patterns for Back Body.

construction, to say nothing of all those workers in making new cars. The automobile permits of a considerable variety of design, especially the rear body, the front part is governed more by the engine setting.

So in this case we have a rear body, that is similar to many we see running about. The corner is made sharp as at c-b of plan. First draw the side elevation of rear body, giving height, length and slope as desired. Divide the curve 1-4 in equal parts, and draw lines parallel to 4-5.

Next develop the part plan as a-b-o, placing the

in pan, which is a distinct advantage.

As our lines run parallel to one another, we develop the section through back end as shown. The height of 6 is equal to the rise of 5 in elevation. This enables drawing the curve 5-2, and represents the girth along the back of hood in a vertical position.

To set out the pattern for top and back, pick the girth from elevation as 1-2-3-4-5 and set as 1-5 in pattern. Draw stretchout lines, and then from each point in miter b-c project over points, thus producing the pattern as shown.

The size of the door can be made at pleasure, although the outlines are governed by the boundary lines of top of pattern. Observe these outlines of door should be parallel with those of pattern.

The side pattern is set out by picking the girth from section through back as 5-0 and set at right angles to b-o of plan.

Draw stretchout lines and then project lines from all points in miter lines of plan, and the pattern is established. Edges must be allowed extra.

Should it be the desire to make the corners b-c round, as at R, then layout a corner piece as at S, which can be described from T. With a raising hammer bump it into shape, and fit in place in the pattern.

In such cases the top, back, and side patterns would be made in one piece, and thus only requiring the filling in of the corners.

### ***Is Enlarging Its Plant for Sheet Metal Goods.***

The plant at Fort Atkinson, Wisconsin, of the James Manufacturing Company has recently been completed.

It covers five and one-half acres and is provided with the latest improvements in equipment.

This company is said to be the largest manufacturer of sanitary barn equipment in the world.

As a consequence of its enlarged facilities, the company is preparing to add a complete ventilating system for all kinds of farm building, hog trough, hog waterers, hog feeders, metal sash, etc.

The James Manufacturing Company is looking for a general foreman to take charge of the sheet metal plant.

It desires a man who is competent to take the large three-story plant now devoted to sheet metal goods and develop it into a real institution.

### ***St. Louis Sheet Metal Folks Have a Jolly Outing.***

Practice makes perfect. The sheet metal folk of St. Louis have been practicing cheerfulness and good fellowship for so many years that they are past masters of the art of gladness.

It is no wonder, then, that they had such a jolly time at their annual outing Sunday, September 12, 1920, in Barthold's Grove, Maplewood, Missouri.

Nine hundred and ninety-nine times out of every thousand times happy people are also lucky people.

Luck was with the St. Louis folk and so they had an ideal day as regards weather conditions.

Sheet metal contractors from all the surrounding towns of Illinois and Missouri were in attendance at the outing which was held under the combined auspices of the Sheet Metal Consumers' Protective Association and the Sheet Metal Contractors' Association of St. Louis.

Games and races for young and old began at 10:00 o'clock in the morning with the regular horseshoe game and ended at 7:00 o'clock in the evening with the smile and gloom contests.

The dancing started at 1:00 o'clock in the after-

noon and lasted until 10:00 o'clock at night.

Elaborate prizes were given to all the winners.

The outing was practically without expense to the members because donations by the supply houses and manufacturers covered the cost of the day.

The committee in charge of the outing was composed of members of the two associations as follows:

GEORGE WALCHLI, Chairman.

FRANK T. BOKERN, High Chief of Contests.

TAD PIEPER, Musical Director.

J. J. ROBERTSON, B. S. PHILLIPS, Floor Committee.

WM. KOELSCH.

F. B. HIGGINS, A. P. FAESSLER, Reception Committee.

J. F. RUTH.

JULIUS GEROCK.

WM. OTTEN.

CHARLES WAND.

The annual baseball game between the two associations for the challenge cup was closely contested. It was won by the Sheet Metal Consumers' Protective Association which has held the cup for nine consecutive years.

The line-up of the teams was as follows:

#### **Sheet Metal Consumers' Protective Association.**

Robertson, 2nd B.

Phillips, S. S.

Kohlmeyer, 1st B.

Wachli, R. F.

Byrne, 3rd B.

Foster, L. F.

Harris, C. F.

Krause, C.

Symonds, P.

#### **Sheet Metal Contractors' Association.**

Faessler, C.

Leunberg, 1st B.

Casey, 2nd B.

Burkman, S. S.

Devley, 3rd B.

Goedke, L. F.

Vooress, R. F.

Harris, C. F.

Ruth, P.

Gruenzenbach, P.

Faessler, P.

A good many competent judges of the matter declared that the chief reason for the prosperity, enterprise, and alertness of the sheet metal trade of St. Louis is that the members of the associations there give full weight to the importance of friendliness and recreation.

Their annual outing is one of the main sources of strength, fellowship and good feeling in the trade.

### ***Describes Process for Cleaning Tin.***

Ordinary tinware is made of sheet iron, coated with tin.

Acids should never be employed to clean such articles, because they attack the metal and remove it from the iron.

Rub the articles to be cleaned first with rotten stone and sweet oil, then finish with whiting and a piece of soft leather.

Articles made of solid tin should be cleaned in the same manner.

In a dry atmosphere planished tin will remain bright for a long period, but it soon becomes tarnished in moist air.

By creating greater sales opportunity it enables those who are efficient and energetic to widen the gap between their accomplishment and that of the inefficient or slothful.



# *Do You Buy Goods or Merely Spend Money for Them? Remember You Are Buying for Your Customers.*

*You Must Buy Satisfactory Goods, Because You Can Not Give  
Satisfactory Service Nor Hold Your Trade with Poor Goods.*

Written especially for AMERICAN ARTISAN AND HARDWARE RECORD, by J. C. Greenberg,  
Peoria, Illinois.

(Copyright 1920, by J. C. Greenberg.)

Have you ever stopped to think that there is a difference between buying goods and merely sending money for goods?

Yes sir, there is a vast difference between buying and spending.

Let me make myself clear on this point, and show you the actual difference.

When a salesman comes to your place of business and offers you a certain commodity which is necessary to your business, how do you know whether the goods are well represented from the point of view of truthful fact?

Just how do you determine whether it will be a beneficial purchase on your part or not?

You as a buyer, must ever bear in mind that a business man is the purchasing man for the public, and that in order that the public may get satisfaction you must purchase well and wisely.

Remember you are not buying the materials for yourself, because you do not keep them for your own use.

Your idea in purchasing goods is to sell them to the public.

It follows then logically, that in order to sell satisfactory goods, you must buy satisfactory goods because, you can not render satisfactory service with poor goods.

I want you to bear in mind this fact—in order that you may give satisfaction to your customers, you must have the raw materials out of which satisfaction is possible.

## **How to Buy Goods.**

The first requisite for buying goods for your business is to know just what is necessary to buy, and what is not.

Second, you must know what virtue the goods have in order that you may put them to the best possible use.

Third, you must know how to apply the goods in order that you may get the best possible results for your customer.

To make this a little plainer—you must know what the article is—you must know what it is made of—you must know what it is for—and finally how to use it.

When you know these things, you will be an intelligent buyer.

Right here is where the reader will say, "This is all bunk. How do you suppose I have time to know all about everything I buy. Life is too short for me to sit up nights studying about everything I buy. What do you suppose I am?"

My answer to this is, that the reason why 95 per

cent of the business men fail in business is just this very thing.

My answer is only three words "a lazy intellect."

There is only one good way to do business and that is the right way.

Unless you know your business you can not possibly succeed.

Buying goods is the very most important step in business, and the one who does not know what he buys—does not know his business—that is all there is to it.

Just ask yourself this question tonight before you go to bed—"What do I really know about metal, paint, cement, solder, copper, cast iron, steel, galvanized iron, black iron, aluminum, and brass?"

When you have asked this question, wait for the answer.

I'll bet a dollar to a salvation doughnut that you will just grin sheepishly, turn over, and say good night.

I do not mean to infer that all of my readers are ignorant of their business—far be it from such—I am merely talking to the man who needs this talk—and if by chance it does the wise business man some good—then, there is no harm done.

When you know what to expect from a certain article you buy, then of course you may expect to represent it right to your customer.

But if you do not know the article you sell, then it is nine chances out of ten that you will fall down on the service end of your business—and believe me service is the thing.

When you know what a thing is—what it is made of—what it is for—and how to use it, then you will be in position to buy goods, not merely spend money.

## **Spending Your Money.**

Let us for a moment consider the wrong way to buy—that is, merely the spending of the money.

You as a business man, know that it takes good money to run a business and that this good money must be wisely invested for the benefit of your business.

Now then, let us suppose that you do not know all about the goods you need, and must depend on the sayso of the salesmen who call on you, what will be the result?

You are at the mercy of another's opinion. You, because of this ignorance, depend on a stranger whose real motive is to take your money away from you.

A salesman's real aim is to sell. Many, yes most,

salesmen are reliable and have a real service-rendering motive; but many have no idea of service—all they know is to sell their goods.

Now then, here comes a salesman who sees at once that you are not a wise buyer, and recognizes at once an easy mark.

You must believe what he tells you because you do not know any better, and that salesman knows it—what will be the result?

You, of course, will get a good stinging, pay good money for poor goods, dissatisfy your customers, and right there is where you begin going out of business.

You may not notice it, but failure gives no warning whatever. It merely is here because you let it in unwittingly.

Many business men who have been stung pass it on as "business experience" and never buy from that salesman again. This is not "business experience" it is business suicide.

The wise business man has only one experience and that is success.

If you do not know all about the goods you must buy for your business, then you are merely spending money and not buying with intelligence. You, the reader, have been stung at least once and will appreciate what I am talking about.

Just recall the last time you were stung on a purchase and you will see the wisdom of knowing how to buy goods. You see it works out this way. If you know about the goods, you will know what questions to ask the salesman, and will see the difference between the knowing salesman and the crook.

If you do not know what information you must have concerning your needs—then it is your hard luck and you are the loser.

You would better get wise to your buying methods and buy with intelligence. It is your only salvation.

Your customers expect you to know your business because you in turn are a salesman also. Do you get that. Can you deny this fact? I'll say you can not.

#### **Spending Money Unwisely.**

Spending money unwisely simply means that you are a spender and not a buyer.

The spender is the man who buys and gets nothing for his money. This is especially true in business.

If you buy right, you can sell right, if you sell right, you give satisfactory service, and if you give satisfactory service, you build up a profitable business, and if you have a profitable business you are success-

ful. One stage follows another just as certain as night follows day.

Let us now look at the wrong side of business. When you buy wrong goods, you must sell wrong goods.

If you sell wrong goods you cannot give satisfaction, and without satisfactory service you can not build up a profitable business, and without profit you can not succeed, and bless your soul, if you can not succeed you will fail.

Now then, tell me how you can beat this law of business. It simply can not be done because it is law and principle both.

Believe me brother, business is not a matter of dollars and cents alone. It takes know how both in buying and selling of your wares.

Business is an exact science and requires as much study as law or medicine does. It is much easier to be a doctor than it is to be a business man because if a doctor makes a mistake and kills a patient, he can say to the law, that he used his knowledge to the best of his ability and understanding, that he has diagnosed the case in accordance with the symptoms shown. Beyond that, it is an act of God.

But in business it is different. If you do not pay your bills, your creditors will put you into bankruptcy, and this means that you have lost your credit.

Without credit you have a darn hard time to get along. My best advice to you who are in business is this: If you want success you must earn it. No one can loan you success. It is not negotiable. The only way to succeed is to know your business thoroughly both from the buying end and from the selling end.

Never lose sight of the fact that there are two ways to fail in business, and they are: Bad buying, and bad selling.

Bad buying digs the grave, and bad selling puts you into it.

Keep these ever in mind, and you will soon learn to avoid these two dangerous obstacles.

#### **Get Your Share of Sunshine.**

The sun is man's best friend. It keeps the air fit to breathe and ripens the food that comes from orchard and field. It destroys the germs of disease and promotes bodily health and vigor. It cheers the heart and warms the body and makes the world bright and beautiful. Get your share of sunshine.

**IT IS a good point to bring out that the man who buys goods does not buy them for himself. He buys them for the folk who trade with him. Of course, buying is just as important as selling. But we need to have the facts brought to mind every once in a while.**

**Indeed, the service of any business begins with right buying. It does not end until right selling takes place. Right selling means giving the people goods that serve and satisfy.**

**To buy the right kind of goods means that you must study your business from every angle. You can not sit in a swivel chair and take things easy if you want to be a big man in your trade.**

**You must work and work hard to get knowledge and to use it for the good of others. You will be healthier and happier and richer by doing so.**



### **Indiana Salesmen's Auxiliary Plans a Big Event.**

Every one connected with the sheet metal trade of Indiana is earnestly and fervently requested to soder the date October 2, 1920, and the time 7:30 p. m., firmly in his mind.

On that particular day the biggest event in the history of the trade is scheduled to occur.

The recently organized Jobbers' and Salesmen's Auxiliary to the Indiana Sheet Metal Contractors' Association will give a smoker on that day to the sheet metal contractors of Indianapolis and to all sheet metal contractors of the state who can contrive to be present.

Musicians' Hall, corner Delaware and Ohio Streets, Indianapolis, has been hired for the occasion.

If there are any shreds of misunderstanding or lack of harmony left in the sheet metal trade of Indiana they will be reduced to 97 degrees below zero and disappear into the eternal void of nothingness by the magic of good fellowship which inspires the Jobbers' and Salesmen's Auxiliary.

H. R. Jones, Vice-President of the Auxiliary is the chairman of the Entertainment Committee.

With the enthusiastic cooperation of E. W. Norman, President, and H. A. Beaman, Secretary, of the Auxiliary, he promises to make Saturday, October 2, 1920, a date which the multi-millionaire descendants of the present generation of sheet metal contractors will discuss with unabated interest as they loll comfortably in their limousine aeroplane speeding over Buenos Aires, Hong Kong, and Singapore.

### **Predicts Big Demand Here and Abroad for Copper.**

The important copper using industries of this country and Europe will need enormous quantities of copper continuously for the next five years, according to the National Conduit and Cable Company of Hastings-on-Hudson, New York.

This demand will develop more intensely when the uncertainties of market tendencies cease, and once the buying movement becomes general and persistent it will furnish the really effective remedy for the depressed conditions that have settled down over the market with extraordinary weight.

As to the outlook, there is no doubt that the problems confronting the situation will be solved, and copper will eventually emerge from the many discouraging circumstances which have tended to slacken and greatly retard the industry.

It is obviously clear, however, that the situation will not be relieved until there is a better adjustment of supply and demand.

There are many and cogent reasons why copper should be placed on a fundamentally sound basis so that the resumption of normal activity in the metal may be hastened.

If the market is further loaded up with unsaleable material the present tendency to delay purchases will continue to exist.

Imports of raw copper are coming in on a considerably larger scale than last year.

Producers are wisely continuing the policy of curtailment operations at mines and smelters, but current output has not dropped off enough to accelerate a sound recovery of the copper situation.

When the position of copper improves confidence in its market status will be clearly indicated by greatly increased purchases.

A quick cleaning up of accumulated stocks would soon follow tangible signs that the prospect of copper being over-produced no longer exists.

Once that conviction goes abroad, so that every consumer may be able intelligently to gauge the position of the metal, it will prove an international factor of immense importance and remove the strain of abnormal depression which has been a dominating force in copper for nearly two years.

### **Tells of Galvanizing in the Shipbuilding Trade.**

Although there are various ways of applying a coating of zinc to the exposed steel or iron parts used in shipbuilding, with a view to preventing corrosion, so far but little has been done in the way of devising a standard test which will readily indicate the nature and quality of the result attained, according to the "Shipbuilding and Shipping Record" for London, England.

It is generally recognized that zinc is the most economical material to use in galvanizing of iron and steel, but other metals, notably aluminum, can be employed, and it remains to be proved by actual tests whether zinc yields the best results that can be obtained.

The American Bureau of Standards has devoted a certain amount of attention to this subject, but so far no standard test for all kinds of galvanizing has been devised.

The salt spray test has received a considerable amount of attention, as also has the method of taking microphotographs of the deposited metal.

In the salt spray test samples of galvanized iron are subjected to the action of a 20 per cent solution by weight of salt in the form of a fine spray; the first appearance of rust indicating the conclusion of the test.

It is indicative of the inconclusive nature of the results that there is no close agreement between the life of the coating as determined by the test, the amount of zinc determined by stripping, and the thickness of the coating measured metallographically.

### **Saving Is the First Need.**

The usual way to start saving is through a plain, everyday, savings bank account.

Every man should have one.

Everyone should set out with a well-defined plan to set aside just so much each week, and then stick to the plan.

Let nothing whatever turn you aside.

Let that obligation be the first one fulfilled every week, no matter whether your bills are paid or not.

# Instructive Notes and Queries

*The Service of This Information Bureau Is Free to Our Subscribers and They Are Urged to Use It Freely.*

## DESCRIBES ALUMINUM BRONZE.

Frequently the question is asked what is the best general bronze for commercial purposes?

Without a moment's hesitation, the answer may be given as aluminum bronze.

It is an alloy of aluminum and copper. The proportion of aluminum varies from one to ten per cent.

The five per cent aluminum bronze has great strength, particularly after hammering. It is very malleable whether hot or cold, casts smoothly, and takes a high polish.

The ten per cent aluminum bronze retains its polish for a long time. It has greater elasticity than steel and can be soldered with hard solder. Also it may be engraved easily.

The directions given for making small quantities of aluminum bronze are as follows:

Using a plumbago crucible, melt the copper and heat it somewhat hotter than its melting point which is 2160 degrees Fahrenheit.

When the copper is in a thoroughly fluid condition and the surface clean, sticks of aluminum of convenient size are pushed down under the surface of the molten copper by means of tongs, thus preventing the aluminum from becoming oxidized.

It is at this point that the need for having the copper somewhat hotter than its melting point becomes apparent because the effect of introducing the aluminum is to chill the copper more or less in contact with the aluminum.

However, having the copper at a good heat to start with, the chilled part is speedily dissolved and the aluminum attacked.

When the required amount of aluminum has been put in the molten copper, the mixture is allowed to stand for a few minutes and then well stirred.

Care must be taken not to rub or scrape the sides of the crucible. The purpose of the stirring is to bring the slag to the surface.

The crucible is then taken out of the furnace and the slag is removed with a skimmer.

The melted mixture is again stirred to bring up what little slag remains in it and it is then ready for casting.

The mixture must not be allowed to remain on the fire longer than is absolutely necessary. No flux is required, the bronze needing only to be covered with charcoal powder.

The main thing to remember in melting aluminum bronze is to handle the mixture as quickly as possible when once it has melted. Sometimes two or three remeltings are necessary before the combination is obtained.

It is the acme of vanity to consider anything impossible which we ourselves can not perform.

## Drop Handles.

From Homer Furnace Company, Coldwater, Michigan.

Kindly tell us who manufactures drop handles for a number four furnace.

Ans.—Fanner Manufacturing Company, Cleveland, Ohio.

## Reversible Fan.

From A. B. Creacy, Box 268, Rock Island, Illinois.

Where can I purchase a reversible fan for a ventilating system.

Ans.—American Blower Company, 140 South Dearborn Street; Buffalo Forge Company, 562 Washington Boulevard; Ilg Electric Ventilating Company, 5 South Wabash Avenue; all of Chicago, Illinois.

## Putty Manufacturers.

From W. W. Wilson, Frederica, Delaware.

Please give me the names of manufacturers of putty.

Ans.—Allentown Manufacturing Company, Allentown, Pennsylvania; William T. Baker, 224 Suydam Street, Jersey City, New Jersey; Devoe and Raynolds Company, Incorporated, 101 Fulton Street, New York City; Felton, Sibley and Company, 136 North Fourth Street, Philadelphia, Pennsylvania; Louisville Lead and Color Company, Louisville, Kentucky.

## Tank Heaters.

From W. R. Kinread, 111 Sycamore Street, Waverley, Massachusetts.

Can you tell me who makes the Fuller and Warren tank heaters?

Ans.—Fuller and Warren Company, Troy, New York.

## German Silver Sheets.

From United States Stove Repair Company, 13-19 South Third Street, Minneapolis, Minnesota.

We would like to know the names of firms who handle German silver sheets.

Ans.—Merchant and Evans Company, 337 North Sheldon Street, Chicago, Illinois; Metal Products Company, Incorporated, 100 South Jefferson Street, Chicago, Illinois; Shimer, McGlynn and Company, 19th and Washington Avenue, Philadelphia, Pennsylvania; Charles H. Besly and Company, 120 North Clinton Street, Chicago, Illinois; U. T. Hungerford Brass and Copper Company, 80 Lafayette Street, New York City.

## Wagner's Improved Slitting Shear.

From Barbour Boat and Pattern Company, Valley Park, St. Louis County, Missouri.

Can you tell us the name of the manufacturer of a tool that is used to trim sheets with clamped in a cornice brake an advertisement of which appeared in your journal a few years ago?

Ans.—This tool is called Wagner's improved slitting shear and is manufactured by the C. DeWitt Wagner, Cedar Rapids, Iowa.



# Illustrations of New Patents

**Watch This Page. Keep Yourself Informed Concerning Improved Devices Which May Save Labor in Your Shop or Add Another Source of Income to Your Retail Store.**

1,350,315. Wrench. Michael Katzmarek, Duluth, Minn. Filed Sept. 9, 1918. Serial No. 253,294. Renewed Feb. 12, 1920.

1,350,353. Washing-Machine. Joseph H. Bair, Haddonfield, N. J. Filed Dec. 27, 1918.

1,350,360. Hinge. Robert W. Crane, Los Angeles, Calif. Filed July 30, 1919.

1,350,380. Clothesline. Frank C. Nelson, Clarksburg, W. Va., assignor of one-half to George W. De Witt, Clarksburg, W. Va. Filed Mar. 20, 1920.

1,350,390. Fish-Stringer. Clarence L. Stein, Aurora, Ill., assignor of one-half to Halsey M. Johnson, Aurora, Ill. Filed Oct. 6, 1919.

1,350,392. Lock. James M. Taylor, Detroit, Mich. Filed Mar. 12, 1920.

1,350,394. Boring-Tool. Jacob Van Der Vorn, Chicago, Ill. Filed May 2, 1919.

1,350,402. Combined Flytrap and Garbage-Can. Louis Joseph Cereghino, Alameda, Calif. Filed Dec. 4, 1916.

1,350,499. Hose-Reel. Edward M. Hamner, Diboll, Tex. Filed June 26, 1917.

1,350,520. Separable Broom-Head and Filler Therefor. Martin Rasmussen, Racine, Wis., assignor to A. R. Tesch, Milwaukee, Wis. Filed Aug. 28, 1919.

1,350,558. Screw Driver and Placer. Isaiah Lewis Messenger, McGraw, N. Y. Filed Sept. 8, 1919.

1,350,622. Roller-Door Equipment. Menzo A. Rutenber, Collinsville, Okla. Filed Apr. 25, 1918.

1,350,641. Detachable Handle. Frederick E. Carl-

son, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 20, 1917.

1,350,654. Broom-Hanger. George B. Keplinger, Chicago, Ill. Filed Oct. 13, 1919. Serial No. 330,435.

1,350,664. Brush For Carpet-Sweepers. Grove R. Merriman, Akron, Ohio, assignor to John R. Vander Putten, Akron, Ohio. Filed Oct. 27, 1919.

1,350,672. Monkey-Wrench. Frank E. Sayres, Thane, Alaska. Filed Dec. 17, 1919.

1,350,692. Wringer-Control Mechanism. Oliver B. Woodrow, Newton, Iowa. Filed Apr. 30, 1918.

1,350,773. Vise-Handle. Joseph H. Bentley, Bridgeport, Conn. Filed Mar. 10, 1919.

1,350,791. Mop-Wringer. William Dequede, New Orleans, La. Filed June 12, 1920.

1,350,792. Window-Ventilator. John Dixon, Gary, Ind. Filed May 3, 1920.

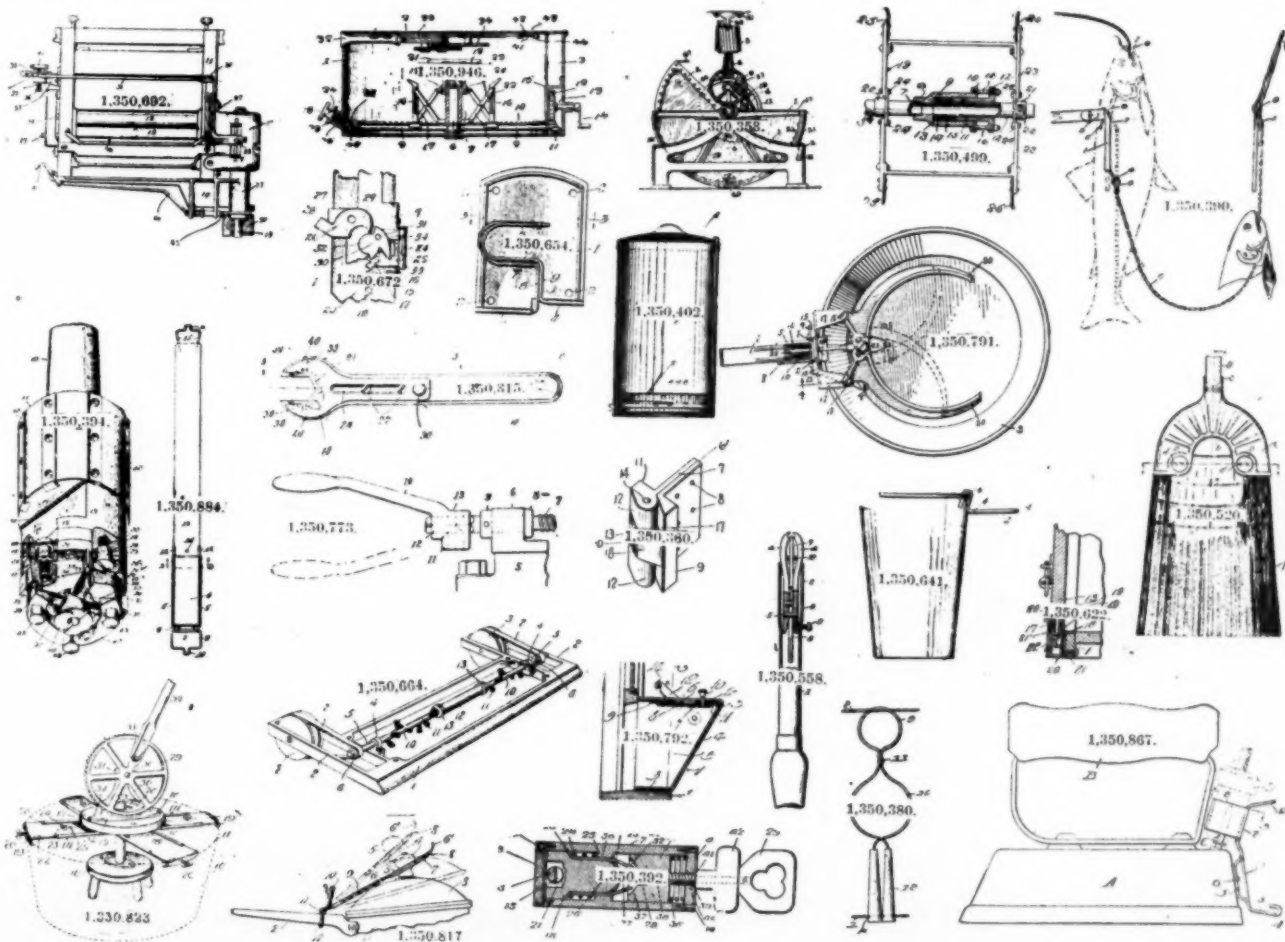
1,350,817. Utensil-Cover Holder. Charles H. Kors, Philadelphia, Pa. Filed Aug. 14, 1919.

1,350,823. Washing-Machine. Lawrence Maples, Chicago, Ill. Filed Apr. 12, 1920.

1,350,867. Electric Flatiron. Henry Kocourek, Chicago, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 21, 1919.

1,350,884. Razor-Sharpener. Felix Rogowski, Chicago, Ill. Filed Jan. 13, 1919.

1,350,946. Reel. Dorsey M. Stockdale, Ellenboro, W. Va. Filed Apr. 29, 1919.



# Weekly Report of the Markets

*General Conditions in the Steel Industry. Review of Prices and Tendencies in Sheet Metals, Pig Iron, etc.*

## **CANCELLATIONS OF ORDERS ARE COMMON IN STEEL TRADE.**

To a considerable extent, a feeling of depression is noticeable in the steel trade.

It is caused by an extension of cancellations on steel contracts from the automobile manufacturers to other consumers, notably the agricultural implement manufacturers.

These latter give as a reason for this the fact that banks are withholding credit from the farmer with which to buy farm machinery on the plea that they are "loaned up."

Some steel orders for export to Cuba have also been cancelled on account of the sugar situation.

The iron and steel export field also continued dull and lifeless as far as any new business is concerned chiefly because of the recent decline in sterling exchange and the belief prevalent among foreign buyers that prices are coming down.

Estimates issued last week by the Bridge Builders and Structural Society show a decrease in the structural steel orders placed with the country's fabricating plants during August as compared with the month previous.

During August orders placed involved some 72,200 tons of structural steel, as against 91,800 in July.

This is the smallest monthly business done by the fabricators since April, 1919, and the volume of orders placed represented 40 per cent of the shop capacity of the country, as compared to 51 per cent in July.

The F. W. Dodge Company's report last week shows that building contracts let for the week ending September 10 totaled \$31,197,100, as against \$42,131,800 for the week previous.

This was in the 25 states of the northeastern part of the country.

### **Steel.**

Material reductions in the volume of unfilled orders on the books of the larger steel companies is also in evidence and it is estimated that during the first half of September there was a reduction of between 225,000 and 250,000 tons in the orders on the books of the leading interest as against the total reduction of 333,450 tons reported at the end of August.

The decrease in orders booked and disappearance of premiums do not entirely come from a financial and business depression, although it does to a large extent reflect such a condition.

For instance, part of the reduction in premiums on iron and steel products is due to the fact that better transportation conditions are making shipments to consumers easier and they are not frantically placing spot orders in one district, in part covering their old contracts booked in another section where freight

movements were embargoed or held up by congestion or car shortage.

This in itself would have a great tendency to reduce prices. As for the lowering of the volume of unfilled tonnage easier freight movements are making it possible for the steel companies to fill accumulated orders at a faster rate from the accumulated stocks in the yards and warehouses and with freer receipts of raw materials and fuel to increase production to a rate more commensurate with the rate of demand.

This is a healthy indication. August is always the slowest month of the year and election is staring us in the face.

### **Copper.**

It is notable that notwithstanding the large amount of scrap available in Europe, some of which is being imported here, refined copper is held firmly at the prices prevailing for several weeks.

The decline in the standard market also has little or no influence upon refined.

Doubtless the large producing interests are expressing their confidence in the future in their refusal to make concessions from prices previously asked.

Some of the smaller producers and firms handling their output have reduced prices and are selling copper for as low as 18.25 to 18.50 cents a pound but the larger producers are holding rigidly to the 19 cent schedule, which includes deliveries from prompt to the end of the year.

It is believed that banking accommodations are being withheld from these companies, thereby forcing them to liquidate.

Many of the copper companies have been compelled to finance the carrying of the red metal during the past few months and those with good banking accommodations are being taken care of, but others are finding it difficult to obtain the necessary credit and are forced to sell.

Copper stocks are generally higher than two weeks ago, the advance having been a steady one, with the exception of one profit taking reaction which found very little stock offered. Many are pointing to this move as reflecting a better condition in the metal market but the more conservative observers attribute it to speculative manipulation.

### **Tin.**

With the increasing rate of operation at the tin plate mills there is a proportionate increase in the consumption of tin, but consumers are making no move to buy at the present time, and the domestic market continues dull. The amount of trading reported was a forced sale of 25 tons at auction.

It is evident that London misjudged last week the



prospects in regard to the coal strike and the market there is now having a setback as the strike seems inevitable.

The change to easier conditions just when the market appeared to be about to recover sharply has stifled the interest which was being shown and conditions are now again dull and uncertain.

The continued liquidation in the New York market is also a disturbing influence—25 tons of Straits for July-August shipment from the Far East were auctioned on the Exchange Monday and sold at 44.37½ cents.

This is probably tin which is very near at hand otherwise it might have brought a better price.

A reduction of one-half cent per pound for pig tin and bar tin has occurred in the Chicago market, the prices now being 49 cents per pound for pig tin and 51 cents per pound for bar tin.

### **Lead.**

Prices for lead still range around 8 cents in New York and 8.20 in St. Louis while the leading interest continues to quote 8.50 New York and 8.25 St. Louis.

The falling off in demand in several consuming lines, together with the importations of foreign metal, are beginning to be felt, in spite of the continued low rate of production.

In the Chicago market, American pig lead has declined from \$9.10 per 100 pounds to \$8.80, and bar lead from \$9.60 to \$9.30 per 100 pounds.

### **Solder.**

Prices for all grades of solder have been decreased \$1 per hundred pounds in the Chicago market.

The quotations now are: Warranted, 50-50, per 100 pounds, \$31.50; Commercial, 45-55, per 100 pounds, \$29.50; and Plumbers', per 100 pounds, \$27.50.

### **Zinc.**

Reimportations of zinc were received in the United States yesterday amounting to 700 tons and further softening in prices is expected.

For the present the market is quotable at 8 cents for New York and 7.80 for St. Louis.

Receipts in the St. Louis zinc market last week amounted to 103,060 slabs as against 90,910 the week before while the amount received so far this year is 3,296,350 slabs as compared with 3,518,580 for the corresponding period last year.

Shipments last week totaled 200,340 slabs as against 185,120 the week previous, while shipments so far this year amount to 6,231,830 slabs as compared with 6,465,760 for the same period last year.

A decline of 5 cents per 100 pounds has taken place in the Chicago market for zinc in slabs, the present quotation being \$8.55 per 100 pounds.

### **Tin Plate.**

Demand for tin plate is variously described according to the viewpoint. There is strong pressure for deliveries against all contracts in force.

As to new buying, this is a matter of price. Nearly all, if not all, of the independents seem to feel that the market price is \$9.00.

At that particular price there is not a heavy de-

mand, but the season price is really \$7.00 and there is practically no doubt that considerable tonnages of tin plate could be sold at a good sized premium over \$7.00, though not at the premium of \$2 that the \$9.00 price recognized by the majority of producers.

### **Sheets.**

There is not much buying of sheets at this time, but there is a little.

The leading interest is out of the market and will not be back until it opens books for first half contracts, unless it should in the course of time take on a little conversion business against some mills that otherwise would be idle on account of not having any steel.

As to the independents, they seem to be sold on an average not only through this year but into January.

However, some of the independents are willing to book orders for shipment to begin within a few weeks.

On such business in black sheets prices average in the neighborhood of 7.00 cents, while on galvanized, of which there are only a very few sellers, the price seems to be fairly uniform at 8.75 cents.

The remarkable thing in the sheet situation is that the cancellations and suspensions by the automobile industry have not made sheets plentiful.

The mills are producing at higher rate than formerly, yet their other customers gladly take all the deliveries that can be made.

The situation is remarkable chiefly in the light of the noise the automobile industry made when it was buying sheets.

At that time it looked as if they were able to buy out whole sheet market and still need sheets, but when it comes to letting go the operation can hardly be seen to create a single ripple.

### **Old Metals.**

Wholesale quotations in the Chicago district which may be considered nominal are as follows. Old steel axles, \$33.00 to \$34.00; old iron axles, \$44.00 to \$44.50; steel spring, \$26.00 to \$26.50; No. 1 wrought iron, \$24.00 to \$24.50; No. 1 cast, \$34.50 to \$35.00; all net tons. Prices for non-ferrous metals are as follows, per pound: Light copper, 12 cents; light brass, 7 cents; lead, 6 cents; zinc, 4½ cents; cast aluminum, 18 cents.

### **Pig Iron.**

There is better feeling in the pig iron market, according to Rogers, Brown and Company, Cincinnati, Ohio, although it has not been expressed to any great extent in purchases.

The total tonnage placed, however, is somewhat over that of the preceding week and inquiry for first half of next year is better—a few large consumers taking an active interest in iron for that delivery.

Revived demand for export tonnage is also apparent, but there has not been sufficient time to determine just what amount of actual business will result from foreign consumers.

The furnaces appear to be in no hurry to sell their output ahead, but are willing to drift along with the market, taking advantage of the somewhat improved car supply to catch up on past due commitments.

# Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

The prices and discounts quoted on this and the following pages, are, for the most part, subject to change without notice. Owing to the unsettled condition of the markets and the shortage of materials it is practically impossible for any manufacturer to guarantee his price for any given length of time.

METALS	TIN.	AUGERS.	BEATERS.
<b>PIG IRON.</b>	Pig tin .....49c Bar tin .....51c	Boring Machine.....40@40&10% Irwin's .....25% Carpenter's Nut.....50%	Carpet. Per doz. No. 7 Tinned Spring Wire...\$1 10 No. 8 Spring Wire cop- pered ..... 1 50 No. 9 Preston ..... 1 75
Southern Fdy. No. 2 ..... 48 67 Lake Sup. Charcoal.. ..... 58 50 Malleable ..... 46 70 Foundry ..... 46 70	<b>HARDWARE</b>	Hollow. Bonney's.....per doz. 30 00	Egg. Per doz. No. 50 Imp. Dover.....\$1 10 No. 102 " " Tinned 1 35 No. 150 " " hotel.. 2 10 No. 10 Heavy hotel tinned 2 10 No. 13 " " " 3 30 No. 15 " " " 3 50 No. 18 " " " 4 50
<b>FIRST QUALITY BRIGHT TIN PLATES.</b> Per box	<b>ADZES.</b>	Post Hole. Iwan's Post Hole and Well...30% Vaughan's, 4 to 9 in. .....per doz. \$14 00	Hand Per doz. \$11 50 13 00 14 75 15 00 Moulders'. 12-inch .....Per doz. 20 00
IC 14x20.....112 sheets \$16 50 IX 14x20..... 18 25 IXX 14x20..... 19 75 IXXX 14x20..... 21 15 IXXXX 14x20..... 22 50 IC 20x28..... 33 00 IX 20x28..... 36 50 IXX 20x28..... 39 50 IXXX 20x28..... 42 25 IXXXX 20x28..... 45 00	<b>CARPENTERS'.</b> Plumbs .....Net <b>COOPERS'.</b> Barton's .....Net White's .....Net <b>Railroad.</b> Plumbs .....Net	Ship. Ford's, with or without screw .....Net list	<b>BELLS.</b> Call. 3-inch Nickeled Rotary Bell, Bronzed base....per doz. \$5 50 Cow. Kentucky .....30% Door. Per doz. New Departure Automatic \$7 50 Rotary. 3 -in. Old Copper Bell... 6 00 3 -in. Old Copper Bell, fancy ..... 8 00 3 -in. Nickeled Steel Bell 6 00 3 1/2-in. Nickeled Steel Bell 6 50
<b>COKE PLATES.</b>	<b>AMMUNITION.</b>	<b>AWLS.</b> Brad. No. 3 Handled....per doz. \$0 65 No. 1050 Handled " 1 40 Shouldered, assorted 1 to 4, .....per gro. 4 00 Patent ast'd, 1 to 4 " 85	Hand. Hand Bell polished. List plus 15% White Metal..... 15% Nickel Plated..... 5% Swiss ..... 10%
Cokes, 180 lbs..... 20x28 \$22 35 Cokes, 200 lbs..... 20x28 22 70 Cokes, 214 lbs....IC 20x28 23 55 Cokes, 270 lbs....IX 20x28 27 40	Shells, Loaded, Peters. Loaded with Black Powder, ..... Less 18% Loaded with Smokeless Powder, medium grades, ..... Less 18% Loaded with Smokeless Powder, high grade, Less 18% Winchester. Smokeless Repeater Grade, ..... Less 15% Smokeless Leader Grade ..... Less 15% Black Powder..... Less 15% U. M. C. Nitro Club.....18% Arrow .....18% New Club.....18%	Harness. Common ..... 1 05 Patent ..... 1 00 Peg. Shouldered ..... 1 60 Patented ..... 75 Scratch. No. 18, socket handled .....per doz. 2 50 No. 344 Goodell- Pratt, List, less.....35-40% No. 7 Stanley..... 2 25	Miscellaneous. Church and School, steel alloys .....30% Farm, lbs...40 50 75 100 Each ...\$3 00 3 75 5 50 7 25
<b>BLUE ANNEALED SHEETS.</b> Base .....per 100 lbs. \$7 02	<b>Gun Wads—per 1000.</b> Winchester 7-8 gauge 10&7 1/2% " 9-10 gauge 10&7 1/2% " 11-28 gauge 10&7 1/2%	<b>AXES.</b> First Quality, Single Bitted, 3 to 4 lb., per doz. 16 50 First Quality, Double Bitted .....per doz. 22 50	<b>BEVELS, TEE.</b> Stanley's rosewood handle, new list .....Nets Stanley iron handle.....Nets
<b>ONE PASS COLD ROLLED BLACK.</b>	<b>Powder</b> Each DuPont's Sporting, kegs...\$11 25 " " 1/4 kegs 3 10 DuPont's Canisters, 1-lb... 56 " Smokeless, drums 43 50 " " kegs.. 22 00 " " 1/4 kegs... 5 75 " " canisters 1 00 Hercules "E.C." and "In- fallible", 50 can drums.. 43 50 Hercules "E.C.", kegs..... 22 50 Hercules "E.C.", 1/2-kegs... 11 25 Hercules "Infallible", 25-can drums ..... 22 00 Hercules "Infallible", 10 can drums ..... 9 00 Hercules "E.C.", 1/4-kegs... 5 75 Hercules "E.C." and "In- fallible", canisters ..... 1 00 Hercules W. A. 30 Cal. Rifle, canisters ..... 1 25 Hercules Lightning Rifle, canisters ..... 1 25 Hercules Sharpshooter Rifle, canisters ..... 1 25 Hercules Unique Rifle, can- isters ..... 1 50 Hercules Bullseye Revolver, canisters ..... 1 00	<b>BROAD.</b> Plumbs, West, Pat.....List " Can. Pat.....\$69 00 Firemen's (handled), .....per doz. 21 00 Single Bitted (without handles). Prices on Warren Silver Steel..application Warren Blue Finished "	<b>BINDING CLOTH.</b> Zincd .....55% Brass .....40% Brass, plated .....60%
<b>COKE PLATES.</b>	<b>KEYSTONE HAMMERED POLISHED STEEL.</b> Discontinued. New product will be announced later.	<b>BAGS, PAPER NAIL.</b> Pounds... 10 16 20 25 Per 1,000...\$5 00 6 50 7 50 9 00	<b>BITS.</b> Auger. Jennings Pattern.....Net Ford Car.....List plus 5% Ford's Ship..... " 5% Irwin .....35% Russell Jennings.....plus 20% Clark's Expansive.....33 1/2% Steer's " Small list, \$22 00..5% " " Large " \$26 00..5% Irwin Car .....35% Ford's Ship Auger pattern Car.....List plus 5% Center .....10%
<b>BLUE ANNEALED SHEETS.</b>	<b>BAR SOLDER.</b> Warranted, 50-50 .....per 100 lbs. \$31 50 Commercial, 45-55 .....per 100 lbs. 29 50 Plumbers' .....per 100 lbs. 27 50	<b>BALANCES, SPRING.</b> Sight Spring.....Net Straight .....Net	<b>COUNTERSINK.</b> No. 18 Wheeler's ..per doz. \$2 35 No. 20 " " 3 00 American Snailhead " 1 75 " Rose " 2 00 " Flat..... 1 40 Mahew's Flat..... 1 60 " Snail.... 1 90
<b>ONE PASS COLD ROLLED BLACK.</b>	<b>ZINC.</b> In slabs .....\$ 8 60	<b>BARS, CROW.</b> Pinch or Wedge Point, per cwt.....\$8 00 to \$9 00	<b>DOWEL.</b> Russell Jennings.....plus 20% Gimlet. Standard Double Cut Gross \$3 40 Nail Metal Single Cut .....Gross \$4 00—\$5 00
<b>SHEET ZINC.</b> Cask lots ..... 15c Less than cask lots....15 1/4-15 1/2c	<b>COPPER.</b> Copper Sheet, mill base....29 1/4c	<b>BASKETS.</b> Clothes. Small Willow....per doz. 15 00 Medium Willow... " 17 00 Large Willow.... " 20 00 Galvanized 1 bu. 1 1/2 bu. Per doz..... \$16 00 \$18 75	<b>REAMER.</b> Standard Square....Dox. 2 50 American Octagon... " 2 50 Screw Driver. No. 1 Common..... 40 No. 26 Stanley..... 75
<b>LEAD.</b> American Pig .....\$ 8 80 Bar ..... 9 30 Sheet. Full coils .....per 100 lbs. \$12 00 Cut coils .....per 100 lbs. 12 25	<b>ANVILS.</b> Solid Wrought.....23 & 23 1/2 per lb.		
	<b>ASBESTOS.</b> Board and Paper, up to 1/16" .....17c per lb Thicker .....13c per lb		



BLACKING, STOVE, (See Polish)

BLADES, SAW.

Butchers'.  
Standard, ¾ & 1¼-in.....Nets  
Clock Spring.....  
Star.....

Hack.  
Atkins .....5%  
Star.....Nets

Wood.  
Disston  
Nos. .... 6 66 24  
\$3 00 \$3 50 \$3 00  
Atkins  
Nos. .... 2 14 18  
\$3 35 \$6 50 \$4 75

BLOCKS.  
Wooden .....20%  
Patent .....20%

BOARDS.  
Steve.  
Wabash Crystal.....Net Prices  
Wabash Art Inlay....  
Wabash Embossed....

Wash.  
No. 760, Banner Globe,  
(single) .....per doz. \$5 25  
No. 552, Banner Globe,  
(single) .....per doz. 6 75  
No. 801, Brass King per doz. 8 25  
No. 860, Single—Plain  
Pump ..... 6 25

BOLTS.  
Carriage, Machine, etc.  
Carriage, cut thread, ¾x6  
and sizes smaller and  
shorter .....20%  
Carriage, sizes larger and  
longer than ¾x6 .....20%  
Machine, ¾x4 and sizes  
smaller and shorter.....35%  
Machine, sizes larger and  
longer than ¾x4.....25%  
Stove .....50-10%  
Tire .....40-5%

Mortise, Door.  
Gem, iron.....5%  
Gem, bronze plated.....5%

Barrel.  
Cast .....Nets  
Wrought .....  
Wrought, bronzed .....

Flush.  
Wrought .....

Spring.  
Wrought .....  
Wrought, heavy.....

Square.  
Wrought .....

BORERS.  
Angular.  
Miller's Falls.....per doz. \$23 00  
Sill borers, No. 51 " 34 00  
52 " 39 50

Bung. Doz.  
Enterprise Mfg. Co.'s No. 1..10%  
No. 2..10%

BOXES.  
Mail, No.... 2 4 10  
Per doz.....\$18 00 23 00 29 00

Mitre.  
Stanley's.....Net Prices  
Stearns, No. 2...per doz. \$48 00

BRACES.  
Fray's Genuine Spofford's .....20&10%  
Fray's No. 08 .....\$7 50  
No. 010 .....8 00

BRACKETS.  
Hay Rack.  
Wenzelmann's No. 1, per  
doz. sets.....\$18 00  
Wenzelmann's No. 2, per  
doz. sets.....19 20

Self.  
Wrought Steel.....40%

Well.  
Oak, Wrought Iron Riveted  
Top Bars.....per doz. \$3 00

BURRS, RIVETING.  
Copper Burrs only..25% above list  
Tinners' Iron Burrs only.....30%

BUTTS.  
Cast Iron.....7½%  
Wrought Brass (New List) Plus 5%  
Wrought Steel, Bright.....40%  
Wrought Steel, Japanned, .....  
.....Net Prices

CALIPERS.  
Double .....Nets  
Inside and Outside.....  
Wing.....

CALKS  
Logger's Boot.  
(Lufkin R. Co.'s), per M..\$7 00

Toe.  
Blunt and medium, 1 prong, per 100 lbs.....\$6 20  
Sharp, 1 prong, per 100 lbs 6 70

CANS.  
Elgin.....  
Gals..... 5 8 10  
Each .....\$4 00 \$5 15 \$5 15  
Iowa Patterns.  
Gals..... 5 8 10  
Each .....\$4 00 \$5 15 \$5 15

CAN OPENERS.  
See Openers.

CAPS, GUN.  
See Ammunition.

CARPET STRETCHERS.  
See Stretchers.

CARRIERS.  
Hay.  
Diamond, Regular...each. Nets  
Diamond, Sling.....

CARTRIDGES.  
See Ammunition.

CASTERS.  
Standard—Ball Bearing.  
.....50&10%  
Bed .....40%

Common Plate.  
Brass Wheel.....15%  
Iron and porcelain wheels,  
new list .....50%  
Philadelphia Plate, new  
list .....50%  
Martin's .....40%

CATCHERS, GRASS.  
No. 160S, per doz.....\$12 25  
No. 165S, " .....14 01

CEMENT, FURNACE.  
American Seal, 5 lb. cans, net \$0 45  
" " 10 lb. cans, " 90  
" " 25 lb. cans, " 1 27  
Pecora, 5 lb. cans.....45  
" 10 lb. cans.....90  
" 25 lb. cans.....1 27

CHAIN AND CHAINS.  
Breast Chains.  
With Slide..... " 5 00  
Without Slide.... " 4 60  
Doublelask ...doz. pairs, \$3 50  
With Covert Snaps 5 80

Picture Chains.  
Light Brass, 3 ft..per doz. \$1 25  
Heavy Brass, 3 ft.. " 1 75

Sash Chain. (Morton's)  
Steel, per 100 ft.  
0.....\$2 50  
2.....3 10  
1.....3 60

Champion Metal.  
0R.....5 40  
2R.....5 60  
1R.....7 75

Champion Metal.—Extra Heavy.  
1H.....9 50

Cable Sash Chains.  
Steel.....List Net Plus 15%

CHALK, CARPENTERS'.  
Blue .....per gro., \$1 40  
Red .....1 40  
White .....1 25  
Common White School  
Crayon ..... 25c

CHIMNEY TOPS.  
In bags.....per bag \$1 70

CHECKS, DOOR.  
Corbin.....Net List  
Russwin.....20%

CHECKS, DOOR.  
Iwan's Volcano.....35%

CHISELS.  
Box.  
Inches.....13 14  
Round, per doz.....\$5 25 5 75  
Flat, per doz.....7 25 8 25

Cold.  
Good quality, ¾ in. and  
larger .....Nets  
Smaller size, per doz.....Nets

Socket, Firmer.  
Ohio.....Price on Application

Socket, Framing.  
Ohio.....Price on Application

Tanged, Firmer.—Barton's  
With handles.....Net list

Choppers, See Cutters, Meat.

CHUCKS, DRILL.  
Goodell's, for Goodell's Screw  
Drivers .....List less 25-40%  
Yankee, for Yankee Screw  
Drivers .....\$6 00

CHURNS.  
Anti-Bent Wood,  
Gal..... 5 7 10  
Each .....\$3 90 4 60 4 85  
Belle, Barrel .....65&7½%  
Common Dash,  
Gal..... 5 7  
Per doz. ....17 00 19 00

CLAMPS.  
Adjustable.  
Martin's .....30%  
No. 63, Screw.....30%

Cabinet.  
Screw .....20%

Carpenters'.  
Steel Bar...List price plus 25%

Carriage Makers'.  
2½" .....per doz. \$7 00  
5" .....14 00  
8" .....23 00  
12" .....46 00

Quilt Frame.  
No. 30 Ball and Socket,  
2½" head.....per gross \$13 00  
No. 50, Ball and Socket,  
3½" head.....per gross 14 50

Hose.  
Sherman's, brass, ¾", per  
doz. ....48c  
Double, brass, ¾-in., per  
doz. ....1 20

Saw Filers.  
Wentworth's, No. 1, \$12.50; No. 2, \$18.25; No. 3, \$16.25.

CLAWS, TACK.  
Wood hdl. No. 10.....per doz. \$3 35  
Forged steel, wood hdl. " 1 75  
Solid steel....." 2 60  
Giant....." 3 00

CLEANERS.  
Drain.  
Iwan's Adjustable.....25%  
Iwan's Stationary.....30%

Pot.  
Wire.....per doz. \$3 75

Side-Walk.  
Steel.....per doz., Net prices

CLEAVERS.  
Family.  
Beatty's, inch.... 7 8 9 10  
Per doz. \$27 00 29 00 33 00 36 00

CLEAVISES.  
Malleable .....10c lb.

CLIPPERS.  
Bolt .....\$2 25&6 00

CLIPS.  
Axle .....65&5%

Damper.  
Standard .....per doz. 70c  
Troy .....35c  
Hame ..... " 50c

CLOTH.  
Emery.  
Star .....New Prices  
B. & A.....

Hardware Wire— Prices to c.  
Full rolls (100 ft.) application  
12 Mesh, galvanized " 37c  
14 " " " 40c  
16 " " " 42c  
18 " " " 45c

Screen Wire. Prices on application  
12 mesh, painted, per  
100 sq. ft. ....

COLLARS, STOVE PIPE.  
Lacquered.  
Inches 5 6 7  
Fancy pattern,  
per doz.... 80c 85c \$1 15

COMPASSES.  
Carpenters' .....15%

COPPER—See Metals.  
COPPERS—Soldering.  
Pointed Roofing.  
lb. and heavier.....per lb. 37c  
2 lb. ....35c  
2½ lb. ....37c  
1½ lb. ....40c  
1 lb. ....45c

CORD.  
Picture.  
White Wire.....60&5%

Sash.  
Sampson Spot, No. 7, per  
doz. ....\$24 50  
Sampson Spot, No. 7, per  
doz. ....\$29 40

CORKSCREWS.  
Walker's .....30%  
Williamson's Regular.....35&11%  
Williamson's Forged Worm.....40%

COTTERS, SPRING.  
All sizes.....87½%

COUPLINGS, HOSE.  
Brass .....per doz. \$2 25

COVERS, WAGON—See Tents.

CRADLES, GRAIN.  
Morgan's Grapevine per doz. \$45 00

CRAYONS—See Chalk.		ELBOWS—Conductor Pipe.		Wood Falls.		HANGERS.	
CUTTERS.		Galvanized Steel, Tin and Terne, Round Corrugated.		Frazer's, 15lb \$1.00; 25lb \$1.50 each.		Barn Door.	
Glass.		Size. Doz.		Hub Lightning, 15lb 90c; 25lb \$1.21 each.		U. S. Roller Bearing.....12 1/4%	
Woodward.....40%		2-inch.....50%		Tin Cans.		Matchless.....12 1/4%	
Meat.		3-inch.....50%		Frazer's		Warehouse Tandem, No. 44.....33 1/4%	
Enterprise—Nos. 5 10 12		4-inch.....50%		1 1/2 lb. per doz.....\$1 75		Conductor F.	
Each.....\$2 50 \$4 25 \$3 75		5-inch.....50%		3 lb. per doz.....3 25		Iwan's Perfection.....45%	
Nos. 22 32		6-inch.....50%		GRINDSTONES.		Eave Trough.	
".....6 50 8 50		EMERY, TURKISH.		Family.		All sizes, 5" or smaller.	
Pipe.		Out of market at present time.		Inches.. 7 8 10 12		.....per gross \$3 80 Net	
Saunders', No. 1 2 3		Domestic, lb.....10c		Per doz. 20 50 21 75 26 25 30 50		All sizes, larger than 5".....per gross, 5 00 "	
Each.....\$1 85 2 75 8 75		EYES.		Loose.		Garage Door.	
Slaw and Kraut.		Bright Wire Screw—See Woods, B. W.		Per ton.....Price on application		Right Angle.....50&10%	
4-knife Kraut.....\$20 00-55 00		Drifting Pick.....60, 10 & 5%		Mounted.		Sliding Folding.....50%	
3-knife Kraut, 8x27 in.....13 00-18 00		Hooks and Eyes—		Ball Bearing.. 1 2 3		Receding.....50%	
1-knife Slaw.....2 50		Brass, 1 1/2" No. 60, per gross.....\$3 50		Each.....\$4 75 5 00 5 25		Parlor Door.	
2-knife Slaw.....3 00		Iron, 1 1/2" No. 50, per gross 1 60		GUN WADS.		Acme.....per set, \$3 75	
Washer.....11 00		FASTENERS, STORM SASH.		(See Ammunition)		Ives' Improved....." 3 40	
DAMPERS, STOVE PIPE.		Shroeder's.....per doz. \$1 50		GUNS.		Lane's Standard....." 3 50	
Diamond		Sensible....." 3 00		Iver Johnson Champion Single		Lane's New Model....." 3 10	
All sizes.....40% from New List		FILES AND RASPS.		Barrel Shot Guns....Net Prices		Le Roy Noiseless.....40&10%	
DIES AND STOCKS		Delta.....30%		Double Barrel, Hammerless....."		Richards.....25%	
Discount.....New List		Swiss.....List plus 25%		HATCHETS.		Advance.....40&10%	
Utility....." net.		Nicholson's—		Crescent.....50%		HASPS.	
DIGGERS		American.....5-10%		Cast Claw.....per doz. \$1 50@1 85		Hinge, Wrought, ..Add 50% to list	
Post Hole		Arcade.....50-10-7 1/4%		Cast Shingling....." 1 50@1 85		With Staples—See Staples.	
Eureka.....per doz. \$14 50		Black Diamond.....40-10%		Germantown.....7 1/4%		HAY KNIVES.	
Iwan's Split Handle (Eureka).....		Eagle.....50-10-7 1/4%		HAY RACK BRACKETS.		See Knives.	
4-ft. Handle..per doz. 15 00		Great Western.....50-10-7 1/4%		Wenzleman's No. 1.....per doz. sets, \$18 00		HINGES.	
7-ft. " ..per doz. 20 00		Kearney & Foot.....50-10-7 1/4%		Wenzleman's No. 2.....per doz. sets, 19 30		Clark's Gravity	
Iwan's Perfection (Atlas).....		McClellan.....50-10-7 1/4%		Blind.		No. 1.....per doz. sets, \$2 35	
Iwan's Hercules pattern.....		Nicholson brand.....40-10-5%		Clark's.....1 2 3		No. 1.....per doz. sets, \$2 35	
per doz.....18 00		J. Barton Smith.....50&2 1/4%		Hinges only....." 4 75 5 50 8 00		No. 3....." " " 5 75	
See also Augers—Post Hole.		X-F Swiss Pattern....Net List		Latches only. 1 90 1 90 ....		<b>Screen Door.</b>	
Dividers, Wing.....25%		Simonds'.....50%		Cast Iron.....gross \$10 00		Steel....." 7 00	
DOOR CHECKS—See Checks		Disston's.....50%		Spring.		Chicago.....Add 12 1/4% to list	
DOORS, SCREEN		Heller's.....60&10%		Columbia Dbl. Acting.....40&10&5@		Gem.....25%	
1/4-in. 4-panel, painted Net Prices		FIRE POTS.		Ideal Detachable, per gro. \$11 00		Matchless.....40%	
1 1/4-in. 4-panel, painted....."		Clayton & Lambert's—		New Idea.....per gro. \$7 20		Oxford.....20%	
1 1/4-in. 3-panel, natural pine, fancy....."		each.....\$4 00 @ 6 00		Wrought Iron.		New Lists.....	
DOOR HANGERS—See Hangers		Gate City.....each, \$ 25		Light Strap Hinges.....5&5%		Heavy Strap Hinges...20&7 1/2%	
DRILLS		Gem.....each, \$5 75 @ 8 50		Light T Hinges...List plus 45%		Heavy T Hinges...List plus 45%	
Blacksmiths' Twist. (New List).....40%		FORKS.		Extra Heavy T Hinges. 15&6%		<b>Screw Hook and Strap.</b>	
Brenst.		Barley.		6 to 12 in.....per 100 lbs. \$7 75		14 to 20 in....." 7 50	
Millers Falls No. 12, each \$46 00		Steel, new list.....New Prices		22 to 36 in....." 7 25		<b>Screw Hook and Eye.</b>	
" " " 112, " 26 00		Hay.		1/4 in.....per doz. pair \$2 50		1/2 in....." 3 50	
Hand.		2-time.....New prices		3/4 in....." 5 00		<b>HOOKS.</b>	
Goodell's Automatic.		3- " ..New prices		Garden.....Net		Grub.	
Nos. 01 03		4- " ..New prices		Extra.....New prices		Hazel.....per doz. New prices	
Per doz. 12 00 14 40		Digging.....New prices		Ladies' and Boys' ....New prices		Mortar.....New prices	
Goodell's Single Gear, per doz.....15 75		Scoop.....New prices		Planter's Eye.....New prices		Weed.....New prices	
Goodell-Pratt No. 4 1/2 per doz. list, less.....30%		Header.		<b>Awning. No. 60.....per gro. 50%</b>		<b>Belt.</b>	
Goodell-Pratt No. 379 per doz. list, less.....30%		3-time.....New prices		Brown's.....70&5%		Jones'.....65&5%	
Reciprocating.		4- " ..New prices		<b>Bench.</b>		See Stops, Bench.	
Goodell's.....per doz. 26 00		Manure.					
DRIVERS, SCREW		4-time.....New prices					
Standard.....Nets		FREEZERS—ICE CREAM					
Lock Ferrule....."		White Mountain 1-quart.....@					
Champion....."		" " 2 " ..@					
Champion Pattern....."		" " 4 " ..@					
Clark's Interchangeable....."		" " 6 " ..@					
Edison....."		Arctic.....1 " ..@					
Reed's Lightning....."		" " 2 " ..@					
Goodell's Spiral....."		" " 4 " ..@					
Yankee Ratchet....."		" " 6 " ..@					
" Spiral....."		GAUGES.					
EAVES, TROUGH		Cream Fall.					
50% off Standard List.		Fairmount.....per doz. \$3.75					
ELBOWS—Stove Pipe		Marking, Mortise, etc.....					
1-piece Corrugated, Uniform		Wire.					
Doz.		Disston's.....25%					
5-inch.....\$2 25		GIMLETS.					
6-inch.....2 30		Discount.....35@40%					
7-inch.....2 60		GLUE.					
Uniform, Collar Adjustable		Bulk.					
Doz.		B Amber.....per lb. 35c					
5-inch.....\$2 65		A White....." 40c					
6-inch.....2 70		H. S. Amber....." 32c					
7-inch.....3 00		Liquid.					
		Army & Navy.....40%					
		Le Page's—					
		List "A".....37 1/4%					
		List "B".....33 1/4%					
		List "C".....25 %					
		GREASE, AXLE.					
		Wood Boxes.					
		Frazer's.....per gro. \$13 00					
		Hub Lightning.....7 50					



Box.

Inch..... 5 7 10 12

Pr doz. \$2 50 2 75 3 25 3 50

Brush.

Common Axe Handle,

per doz. ....

\$22 00

Chain.

Inch. 1/4&5/16 3/8 7/16 1/2

Pr 100 \$7 60-8 10 9 75 11 50 12 60

Clothes Line.

Japanned .....per doz. 48c@1 40

Galvanized.... " 75c@2 50

Coat and Hat.

Common Wire per gro. 1 25-1 65

Conductor.

Iwan's Tinned Sickle.....List

Corn.

Common, riveted, painted

red .....per doz. Nets

Little Giant..... " "

Gate.

See Goods, Bright Wire.

Grass.

Common Nos. 1 3 5 7

Per Doz. ....\$4 50 3 50 3 75 3 25

Hammock.

With plate.....per doz. 1 10

With screw..... " 1 00

Lambrequin, or Drapery,

per gro. ....30c

Picture .....

.50%&50&10%

Potato and Maure.....

Nets

Screw.

Brass .....70%

(See Goods, Bright Wire.)

Seat Spring.....

per lb. 5 1/2c

HOSE, GARDEN.

Per ft.

Guaranteed 3 ply 1/4 inch.....16 c

" 4 ply 1/4 inch.....18 1/2c

" 5 ply 1/4 inch.....19 1/2c

COTTON COV. RUBBER HOSE.

High Grade Apache 1" guar.

press. 400 lbs.....40c

HUSKERS.

Boat.

Nos. ....B E

Per doz. ....New Nets

No. 59.....per doz. New Nets

IRON, PIG.

See Metals.—First column.

IRONS.

Curling.

C.....per doz. \$4 40

B....." 50

A....." 55

Princess ..... " 1 25

Thelma ..... " 1 25

Pinking ..... " 1 00

Plane.

Wood Bench...Add 10% to list

Sad.

Charcoal .....per doz. \$11 00

Common, polished, per

100 lbs. ....7 75

No. 70 Asbestos.....\$1 50 net

No. 100 " .....1 75 net

Common, nickel plated... 8 25

Mrs. Pett's

No. 50 J, Enterprise, per set Nets

No. 55 J, " " " "

No. 50 T, " " " "

No. 65 T, " " " "

Tailors' Sad.....per lb. "

Tailors' Goose.....per lb. "

Ideal.

6 lb. Household .....\$3 50

9 lb. Dressmakers' .....4 25

14 lb. Tailors' Goose.....5 50

Tyres.

Single Duck Nest..per doz. \$5 25

Double Duck Nest.. " 6 25

Button .....each 2 60

JACKS.

Locomotive .....30%

Wagon.

Richard's No. 1..per doz. \$15 50

Miller .....20 00

Oliver, " " " "

Nos. ....0 00

Brush .....\$0 60 \$0 80

Standard,

Nos. ....1 2

Each .....\$0 60 \$1 00

R-W

Big Lift.....40%

Tiger .....40%

KETTLES.

Brass .....15%

Cauldron .....40&5%

Copper .....per lb. 27

Maslin .....40&10%

Sugar .....50%

KNIVES.

Beet Topping.

Clyde, 9-in. Scimitar Blade,

doz. ....\$3 85

California .....3 40

Butcher,

Per doz.

Beechwood Handles, 6"

blade .....\$4 00

Beechwood Handles, 7"

blade .....4 65

Beechwood Handles, 8"

blade .....5 65

Cooper's Hoop.....15%

Corn.

Clipper .....per doz. \$1 75

Disston's .....2 75

Earle's .....3 00

Woodford .....2 25

Drawing.

Standard .....List&5%

Adjustable .....15%

Barton's Carpenters'.....15%

Hay.

Iwan's Solid Socket..doz. \$12 00

Heath's .....13 00

Iwan's, Sickle Edge.. " 18 00

Iwan's Imp'd Serrated " 18 00

Hedge.

Challenge .....per doz. \$6 00

Disston's .....3 75

Mincing.

Common, Single .. " 60

Common, Double.. " 90

Streeter, 4-blade.. " 1 30

Streeter, 6-blade.. " 2 00

Putty.

Common ....per doz. \$0 75@1 50

Lander's ... " 1 75@2 50

Scraping.

Beech Handle.....90@1 10

Lander's .....5 50@6 50

DOORS.

Mineral .....per doz. \$1 80

Porcelain .....1 90

Jet .....2 00

KNOB.

Common Long.

Per ft. ....17c@23c

Extension.

Per ft. ....22 to 28

Step.

Common, per ft. ....22c

Common, with Shelf, add 10c.

IXL .....34c

Challenge, 6 to 9 ft.....55c

10 to 16 ft.....60c

LANTERNS.

Bull's Eye Police.

3-in. Flash Light..per doz. \$13 00

LEADERS, CATTLE.

Nos. ....51 52

Per doz.....\$1 35 1 45

LEATHER, LACE.

Rawhide 1/2".....100 ft. \$2 60

1/2".....4 40

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.

Coppered ...per gro. \$3 25@5 50

Alaska .....8 00

Alaska .....10 00

Transom.

Payson's .....55%

LINES.

Chalk.

Twisted in 20-ft. hanks.

Nos. 4 6 7 8 9

Gro.....Prices on Application

Twisted in 50-ft. balls.

Nos. ....1 2 3 4

Per doz.....Prices on Application

Braided in 20-ft. hanks.

Nos. ....0 1 2 3

Per doz.....Prices on Application

Mason's... " " " "

Clothes.

60-ft. Jute.....per doz. \$0 95

60-ft. Sisal....." 15

60-ft. Cotton....." 25

60-ft. Braided Cot-

ton .....25

LINING, STOVE.

Bricks.....per crate 42c

LOCKS.

Barn Door.

No. 60 Stearns.....per doz. \$12 00

No. 80 " .....24 00

MACHINES.

Riveting.

Stearns No. 1....per doz. \$16 00

Tenoning.

No. 50 Peace's Spoke, each \$16 00

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.

Fibre Head, No. 2 per doz. \$16 50

" No. 3 " 19 50

" No. 4 " 28 50

Round Hickory

.....per doz. \$3 00—5 00

Round Lig-

numvitae.. " 6 25—10 50

Square Hickory " 3 50—5 50

Square Lig-

numvitae.. " 8 00—12 00

Tinners'.

Hickory .....per doz. \$2 25

MATS.

Door.

National Rigid.....50&10&5%

Acme Steel Flexible.....50%

Stove.

No. 2.....per gro. Nets

No. 1.....

No. 1 Asbestos Toasters or

wire-covered Stove Mats,

with handle.....per doz. 1 10

No. 2 Asbestos Toasters,

with ring.....per doz. 60

MATTOCKS.

Plumbs .....35%

MAULS.

Iron, lbs.....10 13 16 18

Per doz...Prices on Application

Wood Face, lb., 10 12 14

Per doz...Prices on Application

Wood Choppers'.

Lake Superior & Oregon

pat. ....40&5%

MEASURES.

Galvanized, doz.....Nets

Japanned, doz.....Nets

MILLS, COFFEE.

Enterprise .....16 2-3%

Parker .....50&5%

Arcade .....40-10%

MITRE BOXES.

See Boxes.

MOPS.

Cotton. Star (Cut Ends).

Pounds 12' 15' 18' 24'-3 oz.

Per doz. \$4 50 5 55 6 75 9 00

NAILS.

Cut Steel....Prices on Application

Cut Iron.... " " " "

Wire.

Small Lots, Prices on Application

Cement Coated.

Small Lots, Prices on Application

Horseshoe.

Ausable .....55&5%

Capwell .....15%

Perfect .....55&5%

Putnam .....20&5%

Star .....30&5%

Picture.

Brass Heads .....25%

Brads .....50&5%

Furniture.....List plus 15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized before weaving...50%

Galvanized after weaving....40%

NIPPERS.

End Cutting.

Stubbs' Pattern, Inches 5 6

Per dozen.....\$4 65 6 75

End and Diagonal Cutting.

Swedish Side, Inches 5 6

Per dozen .....\$4 50 5 75

Hoof.

Heller's .....40&10%

V. & B., No. 52, each.....\$2 25

NOZZLES.

Hose.

Magie .....per doz. \$9 50

Diamond .....6 75

NUTS, HOT PRESSED.

Square Tapped.

\$1.85 off per 100 lbs.

Hexagon Tapped.

\$1.85 off per 100 lbs.

OILERS.

Chase Pattern.

Brass and Copper.....10%

Zinc .....30%

Engineers'.

Tin .....per doz. \$7 00@ 9 00

Machine.

Common .....per doz. \$0 85

OPENERS.

See Box Chisels.

Can.

Delmonico .....per doz. \$1 30

Never Slip.....65

Crates.

V. & B.....per doz. \$7 25-11 00

OUTFIT'S, COMBLING.

Combination .....per doz. \$16 00

Economy .....8 50

Family .....14 50

FAILS.

Cream.

14-qt. without gauge,

.....per doz. \$9 50

18-qt. without gauge,

.....per doz. 11 00

20-qt., without gauge,

.....per doz. 11 75

Sap.

10-qt., IC Tin.....per doz. \$4 00

12 " .....5 50

Stock.

Galv'd qts. 14 16 18 20

Per doz...\$9 75 10 75 12 75 14 50

Water.

Galvanized qts. 10 12 14

Per doz.....\$5 75 6 50 7 25

Wood.

Cable, 2-Hoop.....per doz. Nets

Cable, 3-Hoop....." Nets

Cedar, 3-Hoop, brass " Nets

FANS.

Dripping .....Net

Fry.

Common .....Nets

Acme ....."

Roasting.

Paxton.

Nos.....1 2 3 4

Per doz.....Nets

Neverburn .....Nets

Savory, No. 200...per doz. \$8 40

PAPEE.

Building.

Plain .....per 100 lbs.

Tarred .....Prices on Application

Tarred Felt, " " " "

Red Rosin, per ten.....\$75 00

Sand and Emery.

No. 1, per ream, best grade \$5 40

No. 1, per ream, cheaper

grade .....4 85

Wrapping.

Express .....100 lbs. Nets

PARERS.		Fencing.		PUNCHES.		SAWS.	
<b>Apple.</b>		Black Bull .....All Nets		<b>Conductors.</b>		<b>Band.</b>	
Goodell's .....per doz.	\$10 80	Farmers' Choice .....All Nets		No. 22 .....per doz.	\$3 00	E. C. Atkins & Co.	
Turntable ..... "	11 40	Russell's .....All Nets		Machine .....per lb.	25	Diaston's .....Prices on applic'n	
White Mountain... "	8 40	<b>Flat and Round Nose.</b>		<b>Saddlers'.</b>		Buck.	
Reading, No. 78... "	11 40	Bernard's .....New Prices		Common.....per doz.	1 50 to 5 00	Diaston's .....Prices on applic'n	
<b>Potato.</b>		Lodi .....New Prices		Revolving Spring.		Jackson's .....New nets	
Goodsell's Saratoga, 10 1/4		Paragon .....New Prices		Stearns, No. 10.....per doz.	\$8 00	Butchers'.	
in., doz.....	5 50			" No. 40..... "	16 00	E. C. Atkins & Co.	
Goodsell's Saratoga, 5 in.,		<b>Tinners'.</b>		" No. 60..... "	19 00	Diaston's .....Prices on applic'n	
doz. ....	5 50	Hollow .....Net List		<b>PUTTY.</b>		Circular.	
<b>PICKS.</b>		Solid .....each, 10c		Strictly pure.....per 100 lbs.	\$6 00	E. C. Atkins & Co.	
Adze Eye Ore.....	22 1/2 %	<b>PLUMBS AND LEVELS.</b>		<b>RAIL.</b>		Diaston's .....Prices on applic'n	
Drifting and Poll Picks.....	22 1/2 %	Common .....Nets		Barn Door.		Hiles' .....New nets	
Plumbs, Railroad .....22 1/2 %		Cook's .....40%		Matchless, 1-in.....	5c	Compass.	
Surface .....22 1/2 %		Davis' Iron.....25%		Matchless, 1 1/4-in.....	7c	E. C. Atkins & Co.	
<b>PINCERS.</b>		Davis' Inclinator.....15%		Storm King .....5c		Diaston's .....Prices on applic'n	
Carpenters', cast steel.		<b>POINTERS, SPOKE.</b>		Sliding Door.		Coping.	
No..... 6 8 10 12		Stearns' No. 1.....per doz.	\$10 00	Sliding Door.		E. C. Atkins & Co.	
Each... \$0.63 .80 1.05 1.15		" No. 2..... "	12 00	Bronzed wrought iron,		Diaston's .....Prices on applic'n	
Blacksmiths' .....45%		<b>POKERS, STOVE.</b>		per ft. 8 1/4c		Cross-Cut.	
Heller's .....40%		Wrt Steel, str't or bent,		<b>RAKES.</b>		E. C. Atkins & Co.	
<b>PINS</b>		Nickel Plated, coll han's "	1 10	Garden. Per doz.		Diaston's .....Prices on applic'n	
Clothes.		<b>POLISH.</b>		Steel, Bow, 12-in. Teeth...	\$8 50	Dehorning.	
Common...per box of 5 gro.	\$0 95	Metal.		Steel, Bow, 14-inch " "	9 25	Diaston's .....Prices on applic'n	
Picket.		Wizard, 6 -oz.. per gross	\$18 00	Malleable iron, 12-in. "	4 75	Flooring.	
Fluter, 15-in.....per doz.	\$1 10	" 1/4-pt. " "	20 40	Malleable iron, 14-in. "	5 00	E. C. Atkins & Co.	
Fluted, 21-in..... "	1 60	" 1-pt. " "	36 00	Hay.		Diaston's .....Prices on applic'n	
Spiral ..... "	1 90	" 1-qt. " doz.	6 00	Wood, 10 Teeth.....	\$4 00	Hack.	
<b>PIPE.</b>		" 1/2-gal. " "	10 80	Lawn.		Diaston's .....Prices on applic'n	
Conductor.		" 1-gal. " "	18 60	20 Teeth .....per doz.	\$5 50	Hand and Rip.	
Plain Round and Round Corru-		<b>Stove.</b>		<b>RASPS—See Files.</b>		E. C. Atkins & Co.	
gated.		Black Eagle Paste 5 -oz.	\$13 80	<b>RAZORS—SAFETY.</b>		Diaston's .....Prices on applic'n	
29 Gauge .....50%		" " " 1/2-lb..	17 40	Gillette .....per doz.	\$45 00	Diaston's No. 7 Prices on applic'n	
28 " .....40%		" " " 1-lb..	31 20	Auto Strop ..... "	45 00	Diaston's Nos. 8, D8, 12, 76,	
26 " .....30%		" " " 5-lbs.	5 25	Gem ..... "	8 40	112, D100, and 120,	
24 " .....List		per case ..... "	5 25	Gem (3 doz. lots) " "	8 40	prices on applic'n	
Square Corrugated A and B and		Black Eagle Liquid, 6-oz.	15 60	Ever Ready ..... "	8 40	Keystone .....New nets	
Octagon.		per gross ..... "	15 60	Ever Ready (3 doz. lots) " "	8 40	Keyhole.	
29 Gauge .....40%		Black Kid Paste, 5 lbs.	6 00	<b>RAZOR STROPS.</b>		E. C. Atkins & Co.	
28 " .....35%		per case ..... "	6 00	Star (Honig) .....50%		Diaston's .....Prices on applic'n	
26 " .....25%		Black Jack Liquid, 1/2-pt.	15 60	<b>REGISTERS.</b>		Miter Box.	
24 " .....List		per gross ..... "	15 60	Cast Iron .....List		E. C. Atkins & Co.	
Galvanized Toncan Metal, Gen-		Black Jack Paste, No. 10,	13 20	Steel and Semi-Steel.....10%		Diaston's .....Prices on applic'n	
uine O. H. Iron, Lyonore		per gross ..... "	13 20	Solid Brass or Bronze Metal		Diaston's .....Prices on applic'n	
Metal, Charcoal Iron and		<b>POWDER.</b>		Baseboard .....10%		Panel.	
Keystone C. B.		See Ammunition.		Adjustable Ceiling Ventilators 10%		E. C. Atkins & Co.	
Plain Round and Round Corru-		<b>PRESSES, FRUIT AND JELLY.</b>		<b>REGISTER FACES.</b>		Diaston's No. 7 Prices on applic'n	
gated.		Enterprise Manufacturing Co. 25%		Japanned, Bronzed and Plated,		Patternmakers'.	
28 Gauge .....40%		<b>PRIMERS.</b>		4x6 to 14x14.....10%		E. C. Atkins & Co.	
26 " .....30%		See Ammunition.		14x14 to 38x42.....25%		Diaston's .....Prices on applic'n	
24 " .....List		<b>PRUNERS.</b>		<b>REVOLVERS.</b>		Pruning.	
Square Corrugated A and B Pol-		Diaston's Pole.....per doz.	\$18 60	Iver Johnson Safety Automatic		Diaston's .....Prices on applic'n	
YGON and Octagon.		Water's Improved.....per doz.	60%	Hammer .....New Nets		Stairbuilders'.	
28 Gauge .....35%		<b>PULLERS.</b>		Hammerless ..... "		E. C. Atkins & Co.	
26 " .....25%		Cork.		I. J. Model 1900..... "		Diaston's .....Prices on applic'n	
24 " .....List		Daisy .....each, \$3 10		<b>RINGS AND RINGERS.</b>		Wood.	
14 and 16-oz. Copper, all de-		Phoenix ..... " 1 40		Bull.		E. C. Atkins & Co.	
signs .....List.		Quick and Easy " " 2 70		Copper .....2 1/4-in. 3-in.		Diaston's .....Prices on applic'n	
<b>Portico Elbows.</b>		<b>PULLEYS.</b>		Per doz. ....\$2 40 \$2 65		SAW BUCKS—See Bucks.	
Galvanized and Terne Steel.		Awning—Jap'd .....10%		Rea's Improved Self-		SAW SETS—See Sets.	
1 -inch .....35%		Clothes Line .....10%		Piercing copper,		SAW TOOLS—See Tools.	
1 1/4 -inch .....35%		Hay Fork.		Steel, per doz..... 1 50 1 80		<b>SAW FRAMES.</b>	
1 1/2 -inch .....35%		Iron Wheel, 5-in..per doz.	2 50	Hog.		Common, plain...per doz.	\$1 50
2 -inch .....35%		Wood Wheel, 6-in. "	2 65	Blair's Rings .....per doz.	\$ 75	Common painted.. "	2 10
Tubing .....25%		Wood Wheel, 6-in.,		Brown's Rings..... "	72	<b>SCALES.</b>	
Discounts on Round apply on		pass knot..... "	3 00	Brown's Ringers..... "	1 00	Counter.	
sizes 2-inch to 6-inch inclusive.		<b>SASH.</b>		Hill's Ring, boxes "	72	Pelouze .....40&10%	
Freight allowed on 15 dozen or		Common .....Net		Major Rings..... "	60	<b>SCISSORS.</b>	
more, to all points where		Common-Sense, 2-in.....Net		Perfect Ringers... "	1 50	Star .....60%	
freight rate does not exceed		Empire Pattern, 2-in.....Net		Wolverine Rings.. "	1 65	<b>SCOOPS.</b>	
\$1.00 per 100 lbs. Less than		Ideal .....Net		Wolverine Rings.. "	1 65	Grain.	
15 dozen F. O. B. Factory.		Steel .....Net		White .....per lb.	30c	1/2 bu "Hercules"..per doz.	3 70
Terms: 30 days net, 2% ten days.		<b>SAWS.</b>		Fruit Jar.		1-bu. "Hercules".. "	5 00
Standard Gauge Conductor Pipe,		Pitcher Spout.		White .....per lb.	30c	<b>SCRAPERS.</b>	
plain or corrugated.		Nos..... 1 2 3 4		Key.		Box.	
Not Nested .....35-5%		Each .....Nets		Split, round .....per doz.	\$0 17	Triangular, No. 6 per doz.	\$6 25
Nested solid .....40%		<b>SAW SETS.</b>		Split, square ..... "	32	Road.	
<b>Stove.</b>		<b>SAW TOOLS—See Tools.</b>		Ball, round ..... "	40	Cubic ft. .... 7 5 3	
Per 100		<b>SAW FRAMES.</b>		<b>RIVETS.</b>		With runners, ea. \$7 00 6 50 6 20	
29 Gauge, 3-inch.....\$19 00		<b>SAW SETS—See Sets.</b>		Copper Belt....Add 15% to list		<b>SCREEN DOOR HINGES.</b>	
" 4-inch..... 19 50		<b>SAW TOOLS—See Tools.</b>		Coppered Iron .....30%		Cast iron .....gross, \$13 00	
" 5-inch..... 20 25		<b>SAW TOOLS—See Tools.</b>		Tinners' .....30%		Steel ..... 9 50	
" 6-inch..... 21 00		<b>SAW TOOLS—See Tools.</b>		<b>ROPE.</b>		<b>SCREWS.</b>	
" 7-inch..... 23 00		<b>SAW TOOLS—See Tools.</b>		Cotton.		Bench.	
T-Joint Made up.		<b>SAW TOOLS—See Tools.</b>		1/4, 5-16 in. Com. on reels,		Iron, ins. 1 1 1/4 1 1/4	
6-inch .....per 100 \$60 00		<b>SAW TOOLS—See Tools.</b>		per lb. ....85c		\$6 82 \$7 37 9 45 16 50	
<b>Furnace Pipe.</b>		<b>SAW TOOLS—See Tools.</b>		1/4, 5-16 in. Com. in coils,		Wood, white maple, per doz.	6 00
Double Wall Pipe and Fitt-		<b>SAW TOOLS—See Tools.</b>		per lb. ....85c		Hand—Wood .....50%	
ings .....15%		<b>SAW TOOLS—See Tools.</b>		<b>RIVET SETS.</b>		Hand Rail .....20%	
Single Wall Pipe, Round		<b>SAW TOOLS—See Tools.</b>		See Sets.		Jack .....20%	
Pipe Fittings .....15%		<b>SAW TOOLS—See Tools.</b>		<b>ROPE.</b>		Lag or Coach—all sizes, gimlet	
Galvanized and Black Iron		<b>SAW TOOLS—See Tools.</b>		Cotton.		pointed .....45-5%	
Pipe, Shoes, etc.....10%		<b>SAW TOOLS—See Tools.</b>		1st Quality .....18 1/4c		Saw—Centennial,	
<b>PLANES.</b>		<b>SAW TOOLS—See Tools.</b>		No. 2 .....17 1/4c		Nos..... 1 2 3 4	
Stanley Iron Bench.....net		<b>SAW TOOLS—See Tools.</b>		<b>RULES.</b>		Per doz .....47c 55c 75c 90c	
<b>PLATES, TIN.</b>		<b>SAW TOOLS—See Tools.</b>		Pure Manila.		Wood.	
See Metals in Column 1.		<b>SAW TOOLS—See Tools.</b>		1st Quality, base...per lb.	28 1/4c	F. H. Bright .....70-20%	
<b>PLIERS.</b>		<b>SAW TOOLS—See Tools.</b>		Hardware Grade...per lb.	27 1/2c	R. H. Blued .....67 1/2-20%	
Giant, Button's—Nets.		<b>SAW TOOLS—See Tools.</b>		<b>SAW TOOLS—See Tools.</b>		F. H. Jap'd .....62 1/2-20%	
<b>Outting.</b>		<b>SAW TOOLS—See Tools.</b>		<b>SAW TOOLS—See Tools.</b>		F. H. Brass .....60-20%	
Bernard's .....New Prices		<b>SAW TOOLS—See Tools.</b>		<b>SAW TOOLS—See Tools.</b>		R. H. Brass .....57 1/2-20%	
Lodi .....New Prices		<b>SAW TOOLS—See Tools.</b>		<b>SAW TOOLS—See Tools.</b>		<b>SCYTHES.</b>	
Paragon .....New Prices		<b>SAW TOOLS—See Tools.</b>		<b>SAW TOOLS—See Tools.</b>		Clipper, Grass .....per doz.	\$15 40
<b>Outting.</b>		<b>SAW TOOLS—See Tools.</b>		<b>SAW TOOLS—See Tools.</b>		Honest Dutchman.. "	15



SETS.		SPRINKLERS, LAWN.		TAPES, MEASURING.		WARE.	
Nail.		Stearns' No. 1.....per doz. \$11.50		Asses' Skin.....List&40%		Glue Pots.	
Square head.....per doz. \$1 25		SQUARES.		Lufkin's Steel...Prices on applic'n		Tinned.....Add 15% to Net	
Cup point, knurled " 1 15		Steel and Iron.....Nets new list		Lufkin's Metallic Prices on applic'n		Enameled.....30%	
Rivet.		(Add. for bluing, \$3.00 per doz. net)		Lufkin's Pocket..Prices on applic'n		WASH BOARDS—See Boards	
Farmers'.....per doz. \$2 10		Mitre.....		THERMOMETERS.		WASHERS.	
Tanners'.....25%		Try.....		Tin Case.....per doz. 50c@1 25		Standard O. G. cast iron, per	
Saw.		Try and Bevel.....		Wood Back... " \$2 00@12 00		lb.....3%0	
Allen's Pattern.....per doz. \$5 50		Try and Miter.....		Glass.....12 00		Wrought steel in 8-lb. boxes,	
Disston's Monarch " 7 20		Fox's.....per doz. \$6.00		TIES.		per lb.:	
Disston's X-Cut... " 13 50		Winterbottom's.....10%		Bale.		In 3/16 1/4 5/16 3/8 1/2	
Leach's....." 80		SQUEEZERS, LEMON.		Single Loop, carload		18c 16c 15c 14c 13c	
Nash's Hand....." 3 15		Common Wood.....per doz. \$0 70		lots.....75&7%		11 1/2c 11c 11c 11c	
Nash's X-Cut....." 4 20		Porcelain Lined, Wood " 1 25		Single Loop, less than		WEDGES.	
Stillman's Lever... " 1 30		Boss, malleable iron " 1 20		car lots.....70&15%		Ax.....per doz. Nets	
Stillman's X-Cut.. " 2 50		Iron frame, porc'n		TOOLS, SAW.		Galling.....per lb. Nets	
Whiting Pattern, " 7 50		bowl....." 1 90		Disston's Universal.....40%		Saw.....per lb. 8%	
No. 21....." 7 50		Iron frame, glass		TRAPS.		WEANERS.	
Eccentric Anvil,		bowl....." 2 35		Game with Chains. Per doz.		Calf.	
Hand No. 395,		Little Giant, tin'd		Victor No. 1.....\$2 01		Fuller's, per doz..\$2 00 to \$2 50	
N. P. Morrill Pat-		iron....." 4 00		Oneida Jump No. 1.....2 75		Tyler's Safety, per	
tern....." 14 50		Drum, japanned...." 3 60		Newhouse No. 1.....5 62		doz.....1 85 to 2 40	
SHARPENERS, SKATE.		Drum, nickel plated " 4 50		Mouse and Rat Net per gross		Carroll's, per doz. 3 00 to 3 75	
Diamond.....per doz. \$1 60		Blind.		Out O'Sight Mouse.....\$ 8 00		Hoonier, per doz.. 3 50 to 4 00	
Perfect.....1 20		Barbed.....per lb. 21@22c		" Rat.....15 00		Shaw Perfected.. 3 00 to 3 75	
SHEARS.		Butter, Tub....." 16@19c		" Mole.....100 00		WEIGHTS.	
Nickel Plated, Straight, 6".....\$12 90		Fence—		" 44 Pocket Gopher.....20 00		Hitching.....per lb. Nets	
" 7".....14 85		Polished.....per 100 lbs. \$5 45		Victor Mouse.....2 60		Sash—f.o.b. Chicago	
" 8".....16 20		Galvanized....." 6 15		Hold Fast Mouse.....2 60		Ton lots, per ton.....\$73 00	
Japanned, Straight		Netting.		Victor Rat.....11 00		Smaller lots, per ton.....75 00	
6".....11 00		Galvanized.....per 100 lbs. \$ 6 50		Hold Fast Rat.....11 00		WHEEL BARROWS.	
" 7".....12 40		Wrought.		Official Rat.....13 50		No. 4 Tubular Steel.....@\$10 25	
" 8".....13 50		Wrought Staples, Hasps and		Wood Choker Mouse, 4		Common Tray or Stave	
Tinner's—See Snips.		Staples, Hasps, Hooks and		Holes.....11 00		Tray.....@ 5 00	
SHEAVES, SLIDING DOOR.		Staples, and Hooks and		TROWELS.		Angle leg, garden.....@ 5 00	
Common.		Staples.....50&10%		Brick.		WHEELS.	
Inches.....3 4 5		Extra heavy.....35%		Clover Leaf.....30%		Carborundum.....50%	
Per set.....\$1 40 1 75 2 40		STEELYARD.		Brade's.....15&5%		Emery.....60%	
Hatfield's.		Discount 25%.		Disston's.....30%		Well, Ins.....8 10 13	
Per set..\$1 80 2 10 2 75 35		STONES.		Rose's.....Net		Per doz.....\$5 50 7 25 8 50	
SHELLS—See Ammunition.		Axe.		Plasterers'.		12-in. heavy hoisting,	
SHELLERS, CORN.		Hindustan.....per lb. New Nets		Clover Leaf.....40%		per doz.....\$25 00	
Union.....per doz. \$6 75		More Grit....."		Disston's.....25%		WIRE.	
SHIELDS		Washita....."		W. & McP.....Net		Brass.	
pansion Bolt Shields.....60%		Emery.		TRUCKS.		In coils.....Nets	
SHOES.		No. 126.....per doz. New Nets		Bag.....each \$3 75		In 1-lb. spools, new list...Nets	
Conductor.....60%		Oil—Mounted.		Warehouse or store.		Broom—Tinned.....Nets	
SHOT—See Ammunition.		Arkansas Hard		No. 1, each.....\$24 50		Cable—Same Price as Barbed Wire.	
SHOVELS AND SPADES		No. 7.....per doz. New Nets		No. 2.....22 50		Copper.	
Coal.		Arkansas Soft.. " "		TUBS, WASH.		In coils.....Nets	
No. 2 Woodford..per doz. \$5 50		Washita No. " "		Standard, Wood. Ex.		1-lb. spools, new list...Nets	
No. 132....." 6 00		717....." "		Nos.....2 2 1 large		Fence—Smooth. An'eal'd Galv'd	
Ames', new list, Discount, 12 1/2%		Oil—Unmounted.		Per doz \$9 50 11 25 12 75 15 50		Nos. 6 to 9, less than	
Neverbreak, hollow bck, blk, Nets		Arkansas Hard..per lb. New Nets		TWINE.		car, per 100 lbs. \$4 25 \$4 95	
National....." "		Arkansas Soft.. " "		Market		Hair—New List.....40 & 10%	
Buckeye....." "		Lily White....." "		Quotation		Market. Market Quotations	
Mohawk....." "		Queer Creek....." "		-ply Cotton Wrapping...\$ .85		Bright, full bdis....."	
Bar Drain & Ditching		Washita....." "		4 " Extra Wrapping		Bright, broken bdis...."	
Iwan's Perfection.....\$30 00		Seythe.		4 " "Hvy. Wrapping		Coppered, full bdis...."	
Railroad, etc.		Black Diamond..per gro. New Nets		4 " Wrapping on tubes		Coppered, broken bdis.."	
Black Diamond..\$.per doz. Net		Crescent....." "		3 " cones...		Tinned, full bdis....."	
Crescent....." "		Green Mountain " "		4 " " "		Tinned, broken bdis...."	
Keystone....." "		LaMolle....." "		India Hemp, 1/4-lb. balls.		Picture—In coils..30%@\$0 & 10%	
Star....." "		Extra Quinne-		No. 4 1/2.....36c		In 5-lb. spools.....per lb....26c	
Hollow Back....." "		bog....." "		No. 6.....35c		WRENCHES.	
Ames', new list, Discount 12 1/2%		Red End....." "		No. 8.....33c		Coes Steel Handle, 6-inch.. 30%	
Snow.		STOPPS, BENCH.		No. 13.....49c		" " " 10- " 30%	
Galvanized, with wood han-		No. 10 Morrill pat-		2-ply Jute, 1 1/2-lb balls, lb.....49c		" " " 12- " 30%	
dle, No. 56.....\$1 45		tern.....per doz. \$11 00		Seins.		Coes Knife-Handle, 6- " 30%	
No. 55.....1 55		No. 11 Stearns pat-		Soft.....per lb.....Market		" " " 8- " 30%	
Alaska Steel		tern.....10 00		Med....."....."		" " " 10- " 30%	
D-Handle.....per doz. \$3 50		No. 15 Smith pattern " 7 00		Hard....."....."		" " " 12- " 30%	
Long Handle....." 3 00		STOPPERS, FLUE.		Staging, 1/4-lb. ball, size 21 " "		Coes All Patterns.....30%	
SINKS.		Common.....per doz. \$1 10		" " " 24 " "		Bemis & Call's:	
Cast Iron.		Gem, flat, No. 3.....1 00		Bagging, 1/4-lb. ball, size		Adjustable S, 10%; Adjustable S	
Painted, 16x24.....Net		Gem, No. 1.....1 10		3-ply, "B" in hanks....."		Pipe, 10%; Briggs' Pat-	
Enameled, White, 16x24...."		STOVE PIPE—See pipe.		4- " "B" "....."		tern.....25%	
Wrought Steel.		STOVE POLISH—See Polish.		3- " "A" "....."		Combination Bright.....19%	
Painted, 16x24....."		STOVE POLISH—See Polish.		3- " Silver Finish, in hanks "		Steel Handle Nut.....24%	
SLEDGES—See Hammers.		STRAPS.		Fodder or Lath.		Combination Black.....25&5%	
SNAPS, HARNESS		Skate.....per doz. \$5c&1 20		130 strand.....		Merrick Pattern.....25&5%	
Covered Spring.....Add 30		STRETCHERS.		VISES.		Knife Handle Pattern.	
Judd's Pattern...Add 33 1-6% to list		Carpet.		No. 21, Hand.....\$5 00		No. 62, Screw Wrench, List	
SNATHS.		Bullard's.....per doz. \$3 90		Oval Slide.		plus.....5%	
Double Ring, Bush..per doz. \$9 75		Excelsior....." 5 25		Inches 2 2 1/2 3 3 1/2 4 1/2		WRINGERS.	
Patent Loop, Bush.. " 10 00		Malleable Iron....." 70		Each \$2 70 \$3 20 \$3 60 \$4 20 \$5 75		No. 790, Guarantee, per doz. \$69 00	
Patent Loop, Grass.. " 8 75		Perfection....." 6 30		No. 1, Genuine Wentworth,		No. 770, Bicycle....." 66 00	
SNIPS, TINNERS'		King....." 4 50		Noiseless Saw...per doz. 15 00		No. 110, Domestic....." 59 00	
Clover Leaf.....40&10%		Wire.		No. 2, Genuine Wentworth,		No. 110, Brighton....." 56 00	
National.....40&10%		O. S. Elwood, No. 1 per doz. Nets		Noiseless Saw...per doz. 22 50		No. 740, Bicycle....." 66 00	
Star.....50%		O. S. Elwood, No. 2 " "		No. 3, Genuine Wentworth,		No. 22, Domestic....." 54 00	
SOLDER—See Metals.		TACKS.		Noiseless Saw...per doz. 20 00		No. 22, Pioneer....." 51 00	
SPRINGS, DOOR.		Bill Posters' 6-oz., 25 lb. boxes,		No. 500, All Steel Folding		No. 770B, Bicycle....." 108 00	
Perfect.		per lb.....15c		Saw.....per doz. 16 00		No. 791B, Guarantee " 115 50	
Nos.....2 3 4 5 6 7		Upholsterers' 6-oz., 25-lb.		VISES.		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		boxes, per lb.....15&c		No. 21, Hand.....\$5 00		No. 791B, Guarantee " 115 50	
Reliance.		Wire.		Oval Slide.		No. 791B, Guarantee " 115 50	
Light Medium Heavy		O. S. Elwood, No. 1 per doz. Nets		Inches 2 2 1/2 3 3 1/2 4 1/2		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		O. S. Elwood, No. 2 " "		Each \$2 70 \$3 20 \$3 60 \$4 20 \$5 75		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		SWIVELS.		No. 1, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		Malleable Iron.....per lb. \$0 10		Noiseless Saw...per doz. 15 00		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		Wrought Steel.....per gro. 4 50		No. 2, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Reliance.		TACKS.		Noiseless Saw...per doz. 22 50		No. 791B, Guarantee " 115 50	
Light Medium Heavy		Bill Posters' 6-oz., 25 lb. boxes,		No. 3, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		per lb.....15c		Noiseless Saw...per doz. 20 00		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		Upholsterers' 6-oz., 25-lb.		Saw.....per doz. 16 00		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		boxes, per lb.....15&c		VISES.		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		Wire.		No. 21, Hand.....\$5 00		No. 791B, Guarantee " 115 50	
Reliance.		O. S. Elwood, No. 1 per doz. Nets		Oval Slide.		No. 791B, Guarantee " 115 50	
Light Medium Heavy		O. S. Elwood, No. 2 " "		Inches 2 2 1/2 3 3 1/2 4 1/2		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		SWIVELS.		Each \$2 70 \$3 20 \$3 60 \$4 20 \$5 75		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		Malleable Iron.....per lb. \$0 10		No. 1, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		Wrought Steel.....per gro. 4 50		Noiseless Saw...per doz. 15 00		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		TACKS.		No. 2, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Reliance.		Bill Posters' 6-oz., 25 lb. boxes,		Noiseless Saw...per doz. 22 50		No. 791B, Guarantee " 115 50	
Light Medium Heavy		per lb.....15c		No. 3, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		Upholsterers' 6-oz., 25-lb.		Noiseless Saw...per doz. 20 00		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		boxes, per lb.....15&c		Saw.....per doz. 16 00		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		Wire.		VISES.		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		O. S. Elwood, No. 1 per doz. Nets		No. 21, Hand.....\$5 00		No. 791B, Guarantee " 115 50	
Reliance.		O. S. Elwood, No. 2 " "		Oval Slide.		No. 791B, Guarantee " 115 50	
Light Medium Heavy		SWIVELS.		Inches 2 2 1/2 3 3 1/2 4 1/2		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		Malleable Iron.....per lb. \$0 10		Each \$2 70 \$3 20 \$3 60 \$4 20 \$5 75		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		Wrought Steel.....per gro. 4 50		No. 1, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		TACKS.		Noiseless Saw...per doz. 15 00		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		Bill Posters' 6-oz., 25 lb. boxes,		No. 2, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Reliance.		per lb.....15c		Noiseless Saw...per doz. 22 50		No. 791B, Guarantee " 115 50	
Light Medium Heavy		Upholsterers' 6-oz., 25-lb.		No. 3, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		boxes, per lb.....15&c		Noiseless Saw...per doz. 20 00		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		Wire.		Saw.....per doz. 16 00		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		O. S. Elwood, No. 1 per doz. Nets		VISES.		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		O. S. Elwood, No. 2 " "		No. 21, Hand.....\$5 00		No. 791B, Guarantee " 115 50	
Reliance.		SWIVELS.		Oval Slide.		No. 791B, Guarantee " 115 50	
Light Medium Heavy		Malleable Iron.....per lb. \$0 10		Inches 2 2 1/2 3 3 1/2 4 1/2		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		Wrought Steel.....per gro. 4 50		Each \$2 70 \$3 20 \$3 60 \$4 20 \$5 75		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		TACKS.		No. 1, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		Bill Posters' 6-oz., 25 lb. boxes,		Noiseless Saw...per doz. 15 00		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		per lb.....15c		No. 2, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Reliance.		Upholsterers' 6-oz., 25-lb.		Noiseless Saw...per doz. 22 50		No. 791B, Guarantee " 115 50	
Light Medium Heavy		boxes, per lb.....15&c		No. 3, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		Wire.		Noiseless Saw...per doz. 20 00		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		O. S. Elwood, No. 1 per doz. Nets		Saw.....per doz. 16 00		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		O. S. Elwood, No. 2 " "		VISES.		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		SWIVELS.		No. 21, Hand.....\$5 00		No. 791B, Guarantee " 115 50	
Reliance.		Malleable Iron.....per lb. \$0 10		Oval Slide.		No. 791B, Guarantee " 115 50	
Light Medium Heavy		Wrought Steel.....per gro. 4 50		Inches 2 2 1/2 3 3 1/2 4 1/2		No. 791B, Guarantee " 115 50	
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Torrey's.....per doz. 1 65		Bill Posters' 6-oz., 25 lb. boxes,		No. 1, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		per lb.....15c		Noiseless Saw...per doz. 15 00		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		Upholsterers' 6-oz., 25-lb.		No. 2, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Reliance.		boxes, per lb.....15&c		Noiseless Saw...per doz. 22 50		No. 791B, Guarantee " 115 50	
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Per doz...\$1 55 2 10 3 20		O. S. Elwood, No. 1 per doz. Nets		Noiseless Saw...per doz. 20 00		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		O. S. Elwood, No. 2 " "		Saw.....per doz. 16 00		No. 791B, Guarantee " 115 50	
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Reliance.		Wrought Steel.....per gro. 4 50		Oval Slide.		No. 791B, Guarantee " 115 50	
Light Medium Heavy		TACKS.		Inches 2 2 1/2 3 3 1/2 4 1/2		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		Bill Posters' 6-oz., 25 lb. boxes,		Each \$2 70 \$3 20 \$3 60 \$4 20 \$5 75		No. 791B, Guarantee " 115 50	
Torrey's.....per doz. 1 65		per lb.....15c		No. 1, Genuine Wentworth,		No. 791B, Guarantee " 115 50	
Perfect.....2 3 4 5 6 7		Upholsterers' 6-oz., 25-lb.		Noiseless Saw...per doz. 15 00		No. 791B, Guarantee " 115 50	
Per doz..55c 60c 65c 75c 90c 1 00		boxes, per lb.....15&c					

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Cleveland Castings Pattern Co.,	Cleveland, Ohio
Quincy Pattern Co.,	Quincy, Ill.
Vedder Pattern Wks.,	Troy, N. Y.
<b>Pipe—Conductor.</b>	
Berger Bros. Co.,	Philadelphia, Pa.
Clark-Smith Hdw. Co.,	Peoria, Ill.
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Meyer & Bro. Co., F.,	Peoria, Ill.
Manny Heating Supply Co.,	Chicago, Ill.
Michigan Safety Furnace Pipe	Detroit, Mich.
Safety Interlocking Stove Pipe	Co., Mt. Pleasant, Iowa
Stearns Register Co.,	Detroit, Mich.



<b>Pipe and Fittings—Stove.</b> Hemp & Co., St. Louis, Mo. Meyer & Bro. Co., F. Peoria, Ill. Michigan Safety Furnace Pipe Co., Detroit, Mich. Safety Interlocking Stove Pipe Co., Mt. Pleasant, Iowa Sullivan-Geiger Co., Indianapolis, Ind.	<b>Schools—Sheet Metal Pattern Drafting.</b> St. Louis Technical Institute, St. Louis, Mo.	<b>Stoves—Oil and Gasoline.</b> Quick Meal Stove Co., St. Louis, Mo.	<b>Ventilators.</b> Berger Bros. Co., Philadelphia, Pa. Friedley-Voshardt Co., Chicago, Ill. Standard Ventilator Co., Lewisburg, Pa. Thomas & Armstrong Mfg. Co., London, Ohio
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<b>Polish—Stoves.</b> Black Silk Stove Polish Co., Sterling, Ill. Nickel Plate Stove Polish Co., Chicago, Ill.	<b>Sheets—Black and Galvanized.</b> American Sheet & Tin Plate Co., Pittsburgh, Pa. Brier Hill Steel Co., Youngstown, Ohio Inland Steel Co., Chicago, Ill. Knoodler, Frederick J., Philadelphia, Pa.	<b>Stuffers—Sausage</b> Enterprise Mfg. of Pa., Philadelphia, Pa.	<b>Water Outlets</b> Ajax Bracket and Outlet Co., Cleveland Heights, Ohio
<b>Posts—Steel Fence.</b> American Steel & Wire Co., Chicago, Ill.	<b>Sheets—Blue Annealed.</b> Brier Hill Steel Co., Youngstown, Ohio	<b>Tacks, Staples, Spikes.</b> American Steel & Wire Co., Chicago-New York	<b>Wire.</b> American Steel & Wire Co., Chicago, Ill.
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<b>Punches.</b> Bertsch & Co., Cambridge City, Ind. Niagara Machine & Tool Works, Buffalo, N. Y. Whitney Mfg. Co., W. A., Rockford, Ill.	<b>Sifters—Ash.</b> Diener Mfg. Co., G. W., Chicago, Ill.	<b>Tiles and Shingles—Metal.</b> Cortright Metal Roofing Co., Philadelphia, Pa. Milwaukee Corrugating Co., Milwaukee, Wis. Thomas & Armstrong Mfg. Co., London, Ohio	<b>Wrenches.</b> Coes Wrench Co., Worcester, Mass.
<b>Ranges—Combination Gas and Coal.</b> Quick Meal Stove Co., St. Louis, Mo.	<b>Sifters—Flour.</b> Meyers Mfg. Co., Fred J., Hamilton, Ohio	<b>Tin—Perforated.</b> Harrington & King Perforating Co., Chicago, Ill.	
<b>Registers—Warm Air.</b> Hart & Cooley Co., New Britain, Conn. Henry Furnace & Fdy. Co., Cleveland, Ohio Independent Reg. & Mfg. Co., Cleveland, Ohio Manny Heating Supply Co., Chicago, Ill. Marsh Lumber Co., Dover, Ohio Rock Island Register Co., Rock Island, Ill. Stearns Register Co., Detroit, Mich. Waterloo Register Co., Waterloo, Iowa	<b>Soldering Fluid.</b> Towner, F. A., Muskegon, Mich.	<b>Tinplate.</b> American Sheet & Tin Plate Co., Pittsburgh, Pa. Knoodler, Frederick J., Philadelphia, Pa.	
<b>Register Shields.</b> Hall-Neal Furnace Co., Indianapolis, Ind.	<b>Soldering Paste.</b> Towner, F. A., Muskegon, Mich.	<b>Tools—Auto Repair.</b> Curfman Mfg. Co., F. L., Maryville, Mo. International Radiator Co., Chicago, Ill.	
<b>Repairs—Furnace.</b> Central Stove & Furnace Repair Co., Chicago, Ill. Nat'l Stove Repair Co., Miamisburg, Ohio Northwestern Stove Repair Co., Chicago, Ill.	<b>Soldering Furnaces.</b> Clayton & Lambert Mfg. Co., Detroit, Mich. Diener Mfg. Co., G. W., Chicago, Ill. Double Blast Mfg. Co., North Chicago, Ill. Quick Meal Stove Co., St. Louis, Mo.	<b>Tools—Carpenters'</b> Lufkin Rule Co., Saginaw, Mich. North Bros. Mfg. Co., Philadelphia, Pa. Stanley Rule & Level Plant, New Britain, Conn.	
<b>Repairs—Stove.</b> Central Stove & Furnace Repair Co., Chicago, Ill. Nat'l Stove Repair Co., Miamisburg, Ohio Northwestern Stove Repair Co., Chicago, Ill.	<b>Specialties—Hardware.</b> Bullard & Gormley, Chicago, Ill. Corbin Screw Corporation, New Britain, Conn. Diener Mfg. Co., G. W., Chicago, Ill. Enterprise Mfg. Co. of Pa., Philadelphia, Pa. Lufkin Rule Co., Saginaw, Mich. North Bros. Mfg. Co., Philadelphia, Pa. Rock Island Mfg. Co., Rock Island, Ill. Stanley Rule & Level Plant, New Britain, Conn.	<b>Tools—Sheet Metal.</b> Bertsch & Co., Cambridge City, Ind. Dreis & Krump Mfg. Co., Chicago, Ill. Niagara Machine & Tool Works, Buffalo, N. Y. Ryerson & Son, Jos. T., Chicago, Ill. Whitney Mfg. Co., W. A., Rockford, Ill.	
<b>Revolvers</b> Johnson's Arms & Cycle Wks., Iver, Fitchburg, Mass.	<b>Speedometers—Bicycle.</b> Corbin Screw Corporation, New Britain, Conn.	<b>Tools—Tin Smiths'</b> Bertsch & Co., Cambridge City, Ind. Double Blast Mfg. Co., North Chicago, Ill. Dreis & Krump Mfg. Co., Chicago, Ill. Knoodler, Frederick J., Philadelphia, Pa. Niagara Machine & Tool Works, Buffalo, N. Y. Ryerson & Son, Jos. T., Chicago, Ill.	
<b>Rolls—Forming.</b> Bertsch & Co., Cambridge City, Ind. Niagara Machine & Tools Works, Buffalo, N. Y.	<b>Sporting Goods.</b> Bullard & Gormley, Chicago, Ill.	<b>Torches—Gasoline.</b> Clayton & Lambert Mfg. Co., Detroit, Mich. Diener Mfg. Co., G. W., Chicago, Ill. Double Blast Mfg. Co., North Chicago, Ill. Quick Meal Stove Co., St. Louis, Mo.	
<b>Roofing—Iron and Steel.</b> American Sheet & Tin Plate Co., Pittsburgh, Pa. Brier Hill Steel Co., Youngstown, Ohio Cortright Metal Roofing Co., Philadelphia, Pa. Friedley-Voshardt Co., Chicago, Ill. Inland Steel Co., Chicago, Ill. Milwaukee Corrugating Co., Milwaukee, Wis.	<b>Stars—Hard Iron Cleaning.</b> Fanner Mfg. Co., Cleveland, Ohio	<b>Transit Companies.</b> Cleveland & Buffalo Transit Co., Cleveland, Ohio	
<b>Rubbish Burners.</b> Hart & Cooley Co., New Britain, Conn.	<b>Statuary.</b> Friedley-Voshardt Co., Chicago, Ill. Gerock Bros. Mfg. Co., St. Louis, Mo.	<b>Trimnings—Stove.</b> Fanner Mfg. Co., Cleveland, Ohio	
<b>Rules.</b> Lufkin Rule Co., Saginaw, Mich.	<b>Steel Sheets.</b> Ryerson & Son, Jos. T., Chicago, Ill.		
	<b>Stock Tanks</b> Thomas & Armstrong Mfg. Co., London, Ohio		
	<b>Stock Waterers.</b> Rock Island Mfg. Co., Rock Island, Ill.		
	<b>Stoves—Camp.</b> Quick Meal Stove Co., St. Louis, Mo.		

**ADVERTISING** is today the mightiest factor in the business world. It is an evolution of modern industrial competition. It is a business builder, with a potency that goes beyond human desire. It is something more than a "drummer" knocking at the door of the consumer — something more than mere salesmanship-on-paper. It is a positive, creative force in business. It builds factories, skyscrapers and railroads. It makes two blades of grass grow in the business world where only one grew before. It multiplies human wants and intensifies human desires. It furnishes excuse to timorous and hesitating ones for possessing the things which under former conditions they could easily get along without.

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## WANTS AND SALES

For paid yearly subscribers, **AMERICAN ARTISAN AND HARDWARE RECORD** will insert under this head advertisements of not more than fifty words **WITHOUT CHARGE**. Employers wishing to secure employes, parties desiring to purchase or sell business, secure partners, or to exchange, etc., will find that these pages offer excellent opportunities to satisfy their wants. Clerks and tinsmiths looking for situations will find it to their advantage to use these columns. Those who respond to these announcements please mention that they "READ THE ADVERTISEMENT IN AMERICAN ARTISAN AND HARDWARE RECORD."

## BUSINESS CHANCES

For Sale—One No. 24 Giblin hot water boiler, 1,800 ft. capacity. Fine condition. A bargain. Write to J. Oscar Smith, Moberly, Missouri. 12-3t

For Sale—Over stock of furnaces. Will sell for less than factory price. For list and prices address Box 123, Clarion, Iowa. 11-3t

For Sale—One new 50 light pilot Acetylene Generator. Never been used. Price \$65.00. John Bauer, Plattsmouth, Nebraska. 13-3t

FOR SALE—Oster adjustable die stock, number six cuts from 2½ inch to 4 inch pipe in good condition. Price, \$35.00. Address L. O. Ketchum, Box 65, Milford, New York. 13-3t

For Sale—At a bargain, a No. 540 Myers Furnace. Wholesale price new \$400. Used one winter. Store building was burned down and never rebuilt. Furnace in good condition. Price \$125.00. A. E. Browder, Albion, Nebraska. 12-3t

For Sale—Complete equipment of tin shop consisting of machinery, tools of all descriptions, benches, stakes, iron racks, etc. We are going to discontinue our shop. Can be had at a bargain. Wahler Brothers, 2553 North Halsted Street, Chicago, Illinois. 13-3t

For Sale—Plumbing and heating shop in small town in southeastern Nebraska. Fine territory to draw from. Reason for selling, am going west. Well equipped and priced at \$550.00. Fine chance for combination tinner and plumber. No other shop. D. G. Hull, Verdon, Nebraska. 12-3t

For Sale—Hardware, furnace, sheet metal, auto radiator and welding business located in best town of its size (population 10,000) in northern Illinois. Invoice about \$10,000 to \$12,000. Sales this year will amount to from \$35,000 to \$40,000. Five men employed. Only fully equipped sheet metal, radiator and welding shop in city. More work than we can handle the year round. Good furnace business. Business is growing steadily. A rare chance for some one. Good reasons for selling. Address B-32, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 10-4t

## HELP WANTED

Wanted—Hardware Clerk. Wood Hardware Company, Janesville, Wisconsin. 13-3t

Wanted—A first-class tinner and furnace man. A. C. Vieth and Sons, Oakland, Iowa. 13-2t

Wanted—A good all around man who can do tinning, plumbing, etc. Married man preferred. J. R. Jamison, Shell Rock, Iowa. 11-3t

Wanted—Tinner for factory work. State wages and experience. Messenger and Parks Manufacturing Company, Aurora, Illinois. 12-3t

## HELP WANTED

Wanted—First-class sheet metal and furnace man. \$1.00 per hour and steady work. The Lindas Company, Kenosha, Wisconsin. 12-3t

Wanted—A good tinner. Steady work the year around. For particulars write to Geo. J. Schwickert, Mankato, Minnesota. 10-3t

Wanted—A first-class sheet metal worker for a general job shop. Steady work to right man. Geo. E. Roesch, Aurora, Illinois. 11-3t

Wanted—Good all around tinner and furnace man. Steady job to right man. \$1.00 per hour. Address J. H. Barnett, Dodge City, Kansas. 13-3t

Wanted—Tinner. Could use young man with some experience in shop and outside work. Address T. B. Shannon Company, Iola, Kansas. 13-3t

Wanted—A first-class sheet metal worker for general job work. \$1.00 per hour. Union shop. John B. Wallig, 307 Church Street, Kenosha, Wisconsin. 13-3t

Wanted—A good tinner and furnace man with some experience at plumbing. A steady job the year around to the right man. W. H. Baker, Sidell, Illinois. 11-3t

Wanted—First-class sheet metal workers. Steady employment. \$8.00 per eight hour day. Open shop. W. J. Corbett Hardware Company, Tucson, Arizona. 13-3t

Wanted—A-1 auto radiator repair man. Steady job if you are the right one. Married man and a Catholic preferred. James T. Weaver, 315 Center Street, Little Rock, Arkansas. 12-3t

Wanted—A good combination tinner and plumber. Good wages and steady job for right man. State experience and wages wanted. Frank L. Wilson, Mechanicsville, Iowa. 12-3t

Wanted—Two first-class sheet metal workers, two first-class pre-war sheet metal workers. \$1.25 per hour. Wire when you can come. H. H. Bain Sheet Metal Works, Shreveport, Louisiana. 13-3t

Wanted—Good all around man for plumbing, heating, tin and sheet metal work, pumps, windmills, etc. Will pay \$50.00 per week to man who can deliver the goods. Address T. P. Johnson, Louisburg, Kansas. 11-3t

Wanted at Once—An A-1 combination tinner, furnace, plumber and fitter. Married man preferred. Come at once. Will give the right man steady work the year round at 75c per hour. A. L. Spradling, Hoopeston, Illinois. 13-3t

Wanted—Experienced plumber and furnace man. Must be of good clean habits and capable to take care of shop. Steady work the year around. Will be ready for work about October 15th. State wages, etc., in first letter. Ricklef's Hardware, Monticello, Iowa. 12-3t

Wanted—Licensed plumber; also one who has knowledge of tinning; to work in country town shop on his own time. Will furnish tools and shop free. Good opening for a hustler. Can get \$1.00 to \$1.25 per hour. Kindly address B-33, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 11-3t

## SITUATION WANTED.

Situation Wanted—By a first-class all around tinner and furnace man with some good reliable firm in town of from five to twenty thousand. Address 10 New Street, Mt. Clemens, Michigan. 11-3t

Situation Wanted—By first-class sheet metal worker and pattern cutter with 14 years' experience. Am 32 years old. Have had experience in cornice skylight, furnace, mill elevator work and manufacturing. Can read blue prints and lay out work from same. Am strictly sober, reliable and a competent workman. Am a union man. Will consider nothing less than \$1.00 an hour and steady inside work. Would like to get a position with a large firm where there is a chance for advancement. Please address B-31, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 11-3t

## SITUATION WANTED

Situation Wanted—By tinner with knowledge of plumbing. Have had 16 years' experience. Can do estimating. Have taken care of my own shop for several years. I will sign a yearly contract with a good honest man. I prefer West. Write giving particulars as to wages, living conditions, etc. L. Phillips, Masonic Club, Akron, Ohio. 11-3t

## TINNERS' TOOLS

Wanted—A bench punch. Must be in first class condition. Geo. J. Schwickert, Mankato, Minnesota. 10-3t

Wanted—To buy eight foot square shears, foot power. Must be in good condition. Kindly address B-35, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 13-3t

Wanted—A complete set of tinner's tools. State what you have and price in first letter. Address B-34, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 13-3t

## BOOKS.

Wanted—Men who know their trade from A to Z. That's the way the advertisements for Help Wanted start. You can learn more about your trade if you read good books on the subjects you are less familiar with. For a book covering the subject of Warm Air Heating thoroughly, you should read Snow's Furnace Heating, 234 pages. Price \$2.50. With AMERICAN ARTISAN one year (52 issues), \$3.85. Order your copy today from AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.

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Wanted—Warm Air Heater Installers to read PROGRESSIVE FURNACE HEATING. A practical manual of designing, estimating and installing modern systems for heating and ventilating buildings with warm air. Profusely illustrated. The whole range of the subject is concisely and fully covered. There is nothing highly technical in this book, no methods not easily comprehended and applied. Size, 6x9 inches, 280 pages, 189 illustrations. By Alfred G. King. Price, \$3.00. With AMERICAN ARTISAN one year (52 issues), \$4.25. Get a copy of this book now. Read it in your spare time and learn more about your important business. All books sent prepaid. No books exchanged. AMERICAN ARTISAN, 620 South Michigan Boulevard, Chicago, Illinois.

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